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CANTOR LECTURES ON THE ART OF LACE MAKING.

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CANTOR LECTURES

ON THE

ART OF LACE-MAKING,

BY

ALAN S. COLE

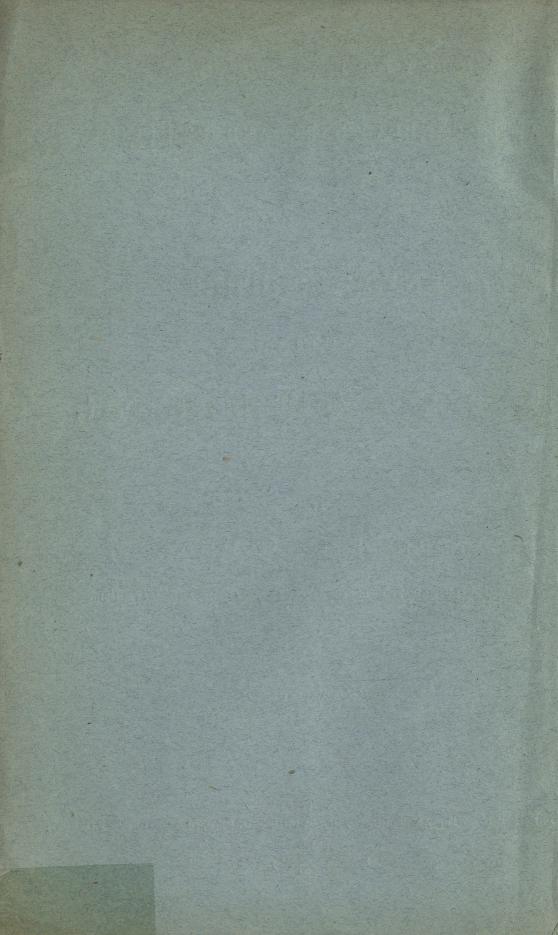
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THE ART OF LACE-MAKING.

LECTURE I.—Delivered Monday, April 4, 1881.

Introduction. Early forms of twisted, plaited, and looped threads. Ornamental borders of costumes. Sumptuary laws. Venetian books of patterns for embroidery and lace. Flanders a centre of linen trade of Europe. Spanish and French importations of early lace. Effect of production of machinemade lace upon production of hand-made lace.

I. In undertaking to deliver a course of Cantor comes to us at breakfast time, but it is not of the lectures upon "The Art of Lace-making," in compliance with a gratifying invitation from the Council of the Society of Arts, I am sensible of the responsibility I incur. I cannot, however, hesitate to claim your indulgence, since the position of lecturer is new to me. An experienced and able lecturer knows at once how to engage the sympathy of his audience. He leads them over difficult ground, making the difficulties interesting, just as a good guide does, who shows you the way up a mountain, through forest and rocky lands, across crevasses, and over snow fields. The tracing of a history of lace-making is not, however, likely to be beset with many difficulties. It covers a considerable space of time—over three hundred years —and involves the consideration, as all history does, of a number of circumstances. A tolerably straight course must, if possible, be adhered to, so that we may not stray off into tempting by-paths. Many works have been written and published upon lace-making, and I can hardly hope to bring to light many facts or reflections which have not been previously placed before the public. If I am successful in adding anything which may assist a true view of the development of lace-making I shall be fortunate. shall be fortunate.

II. Every one present, I presume, knows what lace is, in the ordinary and modern sense of the word. The shop-windows of linendrapers are filled with it. It is universally worn. About twice a week we may read in our newspapers that the lace trade is full of activity at Nottingham, in Belgium, in France, and elsewhere. If we go abroad, we see lace much like that we have left at home. Sometimes the lace trade is reported to be less vigorous than it was, sometimes it is more. A fair demand is maintained for Coraline and Vermicelli laces, whilst Bobbin, Bretonne, and Mechlin sell pretty well at "late" prices. The market, however, is dull on the whole, and there is no business in Valenciennes. This sort of intelligence usually few observations upon the ability to twist, plait,

exciting character of some news which spoils our meal. After breakfast, if we happen to have absorbed the intelligence about the lace market, absorbed the intelligence about the late market, we may go out expecting to find symptoms of it in the shops. Not at all, however. A constant supply of cheap laces is to be purchased.

III. Now, I think that it would take some of us by surprise were an announcement to be made that

Parliament had passed a Bill ordering that no lace wider than two inches was henceforth to be worn. What a disturbance this would create amongst lace workers and lace wearers! It would be almost more exciting than many recent points of domestic news. Judging from past events in similar given the contract of the contract similar circumstances, the ingenuity of people would be sharpened into all sorts of evasions of the

law, both numerous and humorous.

IV. In the 14th, 15th, and 16th centuries, laws regulating costume were in force, and a result of them has been a number of entertaining anecdotes about evasions of them—smuggling, and so forth. An incident in the history of these laws was the imperturbability with which fashion displayed itself to be stronger than the laws. In spite of regulations and edicts, which one might suppose would have prevented people from teaching one another their fashions, and from interchanging their national productions and manufactures, this teaching and interchanging went on generally in an overt way, but still persistently forming and virtually ruling what is called fashion. At the outset of lace-making, difficulties like those just mentioned were imposed upon its development. Nevertheless, fashion has stimulated lace-making, and has raised lace work to an eminence in public favour, the hold upon which modern machinery is certainly striving to perpetuate, by widely disseminating lace of a special class.

V. The plan which I have adopted for my lectures

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and loop threads together, upon the invention of patterns, upon the result which ensued when the twisting and plaiting were rendered subject to the pattern, and upon incidents connected with the development of this subjection of handicraft to Secondly, I propose to describe the features of specimens in the two chief divisions of hand-made lace; and thirdly, to touch upon the present condition of lace-making by hand, and the

history of lace-making by machinery.

VI. When one wishes to make the acquaintance of a person, one generally desires to see her or him face to face, and to interchange ideas by conversation, and so forth. Probably what others have said has given us this wish. This was my case as regards lace. I heard a good deal about lace when I had the honour of serving on a committee which was formed to promote an Exhibition of Ancient Lace for the International Exhibition at South Kensington, in 1874. But when I came to be presented to some of the most splendid productions of the art, I found that hearsay did not give me much assistance in making myself really acquainted with these works. It was necessary to do more than express satisfaction at a beautiful piece of work, or to allow oneself to be carried away with enthusiasm over the interesting fact that some Venetian Dogeress had actually made a certain length of vandykes. Throughout the collection shown at the Exhibition there was an immense variety of pattern and of workmanship. It seemed to me that I should be more likely to understand this if I applied myself to a careful examination of a few of the important specimens. Accordingly, a pocket magnifying glass became a necessity, and through its help I began to arrive at some sort of classification of laces by stitches. As soon as I had satisfied myself as to the marked difference between needle-made and pillow-made lace, I began to study the catalogue and the descriptions printed in it. I confess to having been surprised, and inclined to doubt my eyesight, at the frequency with which my opinion clashed with the descriptions. seemed as though tradition was more often than not exactly the reverse of personal experience. Some of the best traditions were only credible, subject to important "if's;" others, however, seemed to gain in historic value as they harmonised themselves with results of actual observations. sense of gratitude to the spirit which moved me to closely examine specimens, and not to rely too much upon traditions and so-called authentic records, required me to give you this little account of my experience in studying lace.

VII. From examining lace-work, with all the minute twistings, plaitings, and loopings of fine thread, and with all the variety of patterns so ren-dered, one is naturally led to think of the workwoman or man, under whose skilful fingers such extraordinary works have grown. What were the materials and implements used? and to what pur-

poses has the work been put?

VIII. A first element in lace-making is the human ability to twist, plait, and loop thread together. In restricting my remarks to this human ability, think one should not assign an absolute originality to man in his craft of making elaborate patterns in delicate materials. The amazing domiciles and

J. G. Wood calls them in his admirable book on the subject—made by many kinds of creatures, like moles, foxes, squirrels, birds, crabs, snails, birds, crabs, beetles, ants, spiders, and bees, at once suggest varied forms of patterns, some of which are produced by plaitings and twistings. The marvellous, mathematical regularity of the hexagons in the bees' honeycomb, the radiations within polygonal shapes of the spider's web, the beautiful patterns of snow crystals, are all evidences of occult powers to design what we may call ornament; and the mere mention of them opens up an inexhaustible field of study, which would carry us far from lace-making. Even human skill in stitching—so notable a feature in some sorts of lace-making—has a prototype in the sewing done by tailor birds. I cannot resist the temptation of quoting a passage from Dr. Wood's book, which tells us how the tailor bird makes its hanging nest:

"The bird chooses a convenient leaf, generally one which hangs at the end of a slender twig; it pierces a row of holes along the edge, using its beak in the same manner that a shoemaker uses his awl, the two instruments being very similar to each other in shape, though not in material. These holes are not at all regular, and in some cases there are so many of them that the bird seems to have found some special gratification in making them just as a boy who has a new knife makes havor on every piece of wood he can obtain. When the holes are completed, the bird next procures its thread, which is a long fibre from some plant, generally much longer than is needed for the task which it performs. Having found its thread, the feathered tailor begins to pass it through the holes, drawing the sides of the leaf towards each other, so as to form a kind of hollow cone, the point downwards. Sometimes a single leaf is used for this purpose, but whenever the bird cannot find one that is sufficiently large, it sews two together, or even fetches another leaf and fastens it with the fibre."

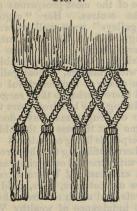
IX. You will, I hope, pardon me for this digression from the point we were considering, namely, man's ability in twisting and plaiting threads. I think we may take it that this ability is hardly a sort of spontaneous invention. It appears to be the development of certain natural functions of the fingers. Therefore, where there are hands and fingers, and a governing intelligence, the ability to plait, twist, and loop threads can display itself. One might not expect to find that the ability is restricted to one nation, or to one period of the world's history. Still, certain conditions, no doubt, especially favour the exhibition of this twisting and plaiting ability, and perhaps chief amongst such conditions is the existence in marked quantities of articles like flax or silk, and fibres of all kinds.

of all kinds.

X. The Egyptian sculptures of Beni Hassan, as described by Sir Gardner Wilkinson, furnish us with a record, perhaps 2,500 years before Christ, of all sorts of employment, of customs social and domestic, in Egypt. Upon these Beni Hassan sculptures we have pictorial descriptions of how flax was beaten, the striking of flax after it is made into yarn, twisting the yarn into rope, weaving the yarn into a cloth by a loom, and hundreds of similar interesting details in the practice of arts by dexterous handicraftsmen. At the British Museum is an structures-homes without hands, as the Rev. Egyptian chair with a seat of plaited cords.

Fine threads of twine are stretched in parallel lines at about half an inch from each other, from back to front of the frame of the seat. Similar threads are also stretched from side to side. Thus a simple square meshed foundation is made. Upon it are intertwisted—diagonally across the meshes-rows of some eight or twelve strings or cords, and so the seat, not unlike our modern cane seats, is constructed. This sort of plaiting and intertwisting, however, cannot be said to have decorative pretence, and is not so germane to ornamental work we call lace, as are fringed borders of the robes sculptured upon Assyrian monoliths, of the time of Assur-nazir-Pal, about 800 B.C. (See Fig. 1.) The lines forming a trellis pattern in

Fig. 1.



Assyrian border, 800 B.C.

the upper part of these borders appear to consist of round, plaited cords, very similar in their plaiting to that which we see upon fringed borders of Persian carpets now in the market, or to plaited leather whip thongs. On the mantle of the king, the trellis pattern is rather more elaborate than those on the dresses of the attendants. The design is, however, quite primitive.

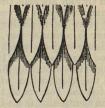
XI. In our English Bible lace is frequently

mentioned, but its meaning must be qualified by the reserve due to the use of such a word in James I.'s time. It is pretty evident that the translators used it to indicate a small cord, since lace for decoration would be more commonly known at that time as "purls," "points," or

"cut works." XII. Of lace amongst the Greeks we seem to have no evidence. Upon the well-known red and black vases are all kinds of figures, clad in costumes which are bordered with ornamental patterns, but these were painted upon, woven into, or embroidered upon the fabric. They were not lace. Many centuries elapsed before a marked and elaborately ornamental character infused itself into twisted, plaited, or looped thread work. During such a period the fashion of ornamenting borders of costume and hangings existed and underwent a few phases: as, for instance, in the Elgin marbles, where crimped edges appear along the loose flowing Grecian dresses.

overlapping one another, an arrangement subsequently modified for their scale armour by Greeks and Romans. The scales of the armour

FIG. 2.



Overlapping leaves of armour.

were of leaf (see fig. 2) and billet (see fig. 3) forms, as were the edges of the under skirt and

Frg. 3.



Overlapping scales of armour of billet forms.

sleeves. If you want to see an attractive example of this method of varying the line of the edge, the costume of Mr. Irving, as Synorix, in Mr. Tennyson's drama of "The Cup," presents you with one. Along the borders of Medieval costume, this custom of indenting the border was perpetuated. (See Fig. 4.) The French word, "dentelle," is

Fig. 4.



Cut, scalloped edge.

evidently derived from the tooth-shape of such scallops

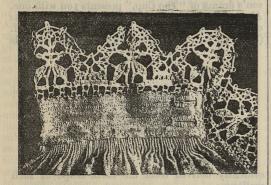
XIV. To continue, nowever, our rapid glimpse of fashion in patterns for bordering costumes and in decorative accessories to dress, which seems to have led up to lace. Mosaics, dating from the 6th century after Christ, preserved in churches at Ravenna, give us representations of early Christian saints, Cecilia, Crispina, Lucia, and others, attached to whose white head-dresses are fringes. Besides these, there are resplendent mosaics of the Empress Theodora and her ladies in waiting, all arrayed in sumptuous apparel, some of which is ornamented with dentations, and others with wavy and undulating borders. 1078, Benedetto Antelami, recording the fashion of his time, wrought a patterned edging to the robe of the Virgin, who appears in a composi-tion he carved in stone for an altar or panel XIII. It is recorded that our "general parents" at Parma. A border, consisting of a series in the Garden of Eden, wore aprons of leaves, of holes, no doubt cut and worked upon

the vestments of figures sculptured by Nicolo Pisano, brings us to the year 1260, and seems to lead us a little nearer to ornamental open work which might be considered to be lace. Somewhat later, we have a repetition of this sort of border treatment in figures sculptured by Tino da Camiano. At Florence, in Or San Michele, Orcagna has decorated the costumes of figures carved in his splendid shrine. Fifty years later, Ghiberti indulged his decorative fancy in a similar way, as is shown in the panels of figure subjects which adorn his doors of the Florence Baptistery. In 1447, various art workmen engaged in sculpturing the temple erected at Rimini, to the glorification of the Malatesta family, decorated the borders of the robes of the figures. But in mentioning these Italian instances of the fashion in borders of dresses, it must not be supposed that similar fashions had not also penetrated to other European countries.

XV. In Edward IV.'s time, in England, "Cut werke was greate in Court and towns, Both in men's hoddes and also in their gowns."

but this "cut werke" is not cut work em-broidery as we know it. It was the cutting out into shapes, the dentation or scalloping of the borders of stuff "hoddes" and gowns, as we find it with the Romans. (See Fig. 4.) This kind of ornamentation undoubtedly influenced the shapes in which most of the first laces were to be inserted, and we trace such shapes in "points" of the 16th century, an example of which I will show you (Fig. 5). Chaucer, too, in his Parson's tale,

Fig. 5.



Cuff trimmed with lace-work in "points," or Vandykes. Late 16th century.

gives us an insight into fashions of dress, when he deprecates "the superfluitee of clothing, which maketh it so dere to the harme of peple, not only the cost of embrouding, the disguising, endenting or barring, ounding, palming, winding or bending, and semblable wast of cloth in vanitee," but also of much else that need not, perhaps, be quoted. Both Flemish and Italian painters, the Van Eycks, the Bellinis, and Carpaccios, supply us with rich representations of gold thread and jewelled fringings worn by the wealthy. Besides these we find that the small linen collars and cuffs of the period were ornamented with some simple and delicate embroidery in black and red silks. Borders of small plaited loops or "purls" were frequently

cuffs, but as late as the end of the 15th century there is no marked display of ornamental open work done in white threads.

XVI. We may now glance at the use of white thread materials like linen, &c., about this time. Northern countries of Central Europe were foremost in the cultivation and employment of flax. Flanders was especially notable in this respect. Holland gave its name to the flax cloth woven in the Middle Ages, and much used in Europe. The town of Cambray gave its name to cambric; and from "d'Ypres" we are supposed to derive diaper, just as damask comes from Damascus, sarcenet from the Saracens, and baudekin from Bagdad. In the 14th and 16th centuries the Venetian Republic was in the glory of the commercial relations with all European countries; she was virtually one of the most prosperous and artistic of European centres. Her "argosies" and "Flanders galleys" were well-known above all other trading vessels on the coast line of Western and Northern Europe. The name "Flanders galleys" marks in a way the considerable commerce Venice had with Flanders. These galleys used to lie along the quays of the delightful old town of Bruges, and there discharge their cargoes. However much during four hundred years the mercantile prestige of Bruges may have declined, there are now signs that the use of the old town as a Belgian Liverpool is being considered. But during all this Northern trafficking four hundred years ago, much trade with Oriental countries was carried on. The wealth and taste of Venice attracted riches and luxuries of costumes, silks, gold and silver clothes, velvets, and much else from the East. An extravagant indulgence of wealthy Venetians in their use of these costly materials stirred the Council of the Republic to pass sumptuary laws from time to time, prohibiting or limiting the use of such things. Venice, however, must not be understood to have been singular in this respect, for similar laws were in force in other countries. These laws, principally aimed at vanity, were, in the circumstances of the times, not without influence in educing artistic ingenuity. And I think that in regard especially to lace-making at Venice, they have an important bearing. A writer of the 17th century, describing Venice, speaks of a pre-eminence that Venetian ladies, among Italian women, enjoyed for the whiteness and fineness of their linen, as well as for their skill in sewing and embroidering. An old Venetian proverb runs, "La camicia preme assai piu del giubbone," or "The shirt before the coat." Now, since the rich coloured decorations used by Venetians in their costumes were, to a considerable extent, placed under the ban of sumptuary edicts, the idea of elaborating ornamentation for their far-famed white linen seems to have arisen. The seeming modesty and economy of such white thread-work, to be adopted as a successor to the gorgeous gold fringes and fine coloured embroideries was, I think, an ingenious but perfectly logical recommendation which helped to give life to this new fancy of fashion. Besides giving the regular embroiderers in Venice a new diversion for their talents, this white thread-work commended itself to the peasant spinners of thread wherever they might be, whether in Italian hills or lower lying lands fastened along the edges of these linen collars and of Flanders. Spinning from off the distaff has

always been a favourite occupation with women in makers would be able to overcome. Twenty years many countries of Europe. The making of simple twisted and plaited white thread edgings to collars and cuffs could be readily taken up by the thread spinners. A new occupation was thus provided, which could be followed by peasants in their homes and out of doors, or by sailors in their leisure time on boardship. In convents, too, where a gentle art like embroidering has always found favour, the taste for white thread and linen ornamentation infused itself. Embroidering linen became so fashionable that designers compiled and published books of patterns, which, as a rule, were dedicated in high-flown, courteous language of the time to "le belle donne," who were addressed by the various compilers in their dissertations on the subject as their gentle, delicate, and magnanimous, and most beautiful readers.

XVII. Two or three antiquaries have paid close attention to the history of these pattern-books. Some claim the honour of first publication for France, others for Italy, and others for Germany. The fashion of pattern-books came to England as well. On looking over many of these rare books (of which, by the way, Signor Oncagnia, of Venice, has recently published some admirable reproductions in fac-simile), I find that with none of them are practical directions supplied of how the different sorts of works, for which there are patterns, are to be executed. It is agreed, I think, that of the pattern-books that by Alessandro Pagannino, dated Venice, 1527, is one of the earliest. It is entitled a "First Book of Embroidery," as well as for instructing "oneself in diverse methods, uses, and ways of embroidery never before attempted or published, the which methods the willing reader may teach himself." Putting aside the author's ascription to himself of the credit of having published the "first" book on the subject, it is not unlikely that the embroidering of shirts, socks, cuffs, and gloves was in vogue before the book appeared. Be this as it may, neither patterns nor titles indicate lace work. In a book by Tagliente, published in 1531, we find an enumeration of stitches, such as "punto a filo" (perhaps a darning stitch), "punto sopra punto" (cross-stitch, perhaps), "punto eiprioto" (Cyprus stitch), "punto croceato" (perhaps a stitch done with a hooked needle, like crochet), "punto in aere" (which might be "punto in aria," or needlepoint lace) "punto fa su la rete" (which would be work done upon a species of canvas), "punto disfilato" (or drawn thread-work), and others. The title "punto in aere," or point in the air, should interest us particularly. But the pattern entitled "punto in aere" is not specially distinguished as a face pattern; with the exception of this doubtful "punto in aere," all the embroidery indicated is intended, as you have seen, to be done upon a foundation of stuff. The materials named to be used are silks of various colours, gold and silver threads, and other sorts of threads; whilst amongst the implements depicted are compasses, pens, pencils, scissors, a pad for pouncing pricked designs, hanks of threads, but there are no bobbins, pins, cushions. The designs are to be worked for costumes and hangings, and besides those I have shown, consist of scrolls, arabesques, birds, animals, flowers, foliage, herbs, and grasses; in fact, so far as lace would be concerned, involve

later we have special geometric patterns workable by lace makers, who were at the threshold, so to speak, of the practice of their art. (See Fig. 6.)

Fig. 6.



Part of a border of needle-point lace, geometric design. About 1550.

At this time, about 1550, the "punto gropposi" (knotted work) is named. The designs, too, of the same time, for "punto in aria," are clearly geometric lace designs.

XVIII. Monsieur Aubry, member of the jury appointed to make awards of prizes to lace manufacturers, who exhibited specimens at the Great Exhibition in 1851, is one of the first of modern writers on the art of lace-making. For the ground-work of her "History of Lace," I find that the late Mrs. Bury Palliser, as all students of this subject must be, is indebted to him. M. Aubrysays that Italy and Belgium dispute the honour of the invention of lace-making. Without attempting to settle the dispute, he says that we can easily imagine that the fabrication of lace in each of these countries was quite different, and thus having drawn upon our imagination, Mons. Aubry is assured enough to say that if Venice is the cradle of needlepoint laces, at Brussels it is certain that the first pillow and bobbin-made laces were produced. After examining the evidence, which he brings forward to support his statement, as well as considering remarks made by Mons. Seguin in his "History of Lace," I have formed the opinion that so distinctive a method of using threads as that involved in ornamental lacemaking has not a contemporary double origin; and in a later lecture I hope to show you a series of specimens which appear to indicate how elaboration of plaiting, twisting, and looping white threads developed according to the demands made upon workmen's ingenuity by the designers of patterns. The workmen's ingenuity developed two distinct classes of work, the one needle-point lace, the other pillow-made lace. The former is, undoubtedly, an offspring of embroidery, just as the latter is of fringes or twisted cords. Both, however, in respect of artistic pretence, are traceable to the pattern-books. We have noticed the appearance of "punto in aria" or needle-point lace, and that of "punto gropposi" or knotted work. A modification of the "punto gropposi" is the "merletti a piombini." (See Fig. 7, p. 8). In this specimen you would see that plaiting is used. There are no knottings, and few simple twistings. The first patterns for both plaiting and needlethe execution of work as none but practised lace point work then appear to have been made in

Venice in the 16th century, say about 1560, and thus M. Aubry's supposed double origin of lace vanishes, that is, if my statement be correct.

Fig. 7.



Plaited and twisted thread-work known as "Merletti a Piombini." About 1560.

XIX. No sooner, however, are novelties produced, than imitations quickly follow. The twisted and plaited thread-work was by some more easily done than needle-point work by others; and the Flemish, the chief spinners and weavers of thread, very naturally Ithink, were the first imitators of Venetian patterns of this sort of work, which was plaited on cushions. We have already seen that commercial relations long existed between Venice and Flanders. It had been chiefly carried on by ships, and this, of course, in respect of heavier merchandise, but in the 15th and 16th centuries an overland route via Augsburg, Cologne, and Bruges, was also used, probably for lighter wares. Copies of pattern-books, and dentated and scalloped trimmings, were no doubt included amongst these lighter wares. It is not, therefore, surprising to find pattern-books, evident imitations of Venetian books, springing into publication along the route overland. At Augsburg and Cologne, and as far north as Antwerp, we know such books were issued. At this last-named city, possibly about 1540, one of the first of the foreign imitations of Venetian books of patterns was produced. It is called "A New Treatise; as concerning the excellency of Needlework, Spanish Stitch, Weaving in the Frame, very necessary to all who desire perfect knowledge of Seamstry, Quilting, and Broidering work, containing 138 plates."

XX. The mention of "Spanish stitch" makes one almost expect to find Spanish books on needle-But, curiously enough, no such books corresponding to the Italian, German, Flemish, French, and English pattern-books have been found or known to have been published in Spain. Spanish stitch is now supposed to have been a black silk embroidery upon linen, and its use is assigned to the early 17th century. This is not a lace, however. Of the supposed manufacture of artistic lace in Spain, it may be convenient for me now to speak. It will, no doubt, be a matter of surprise to many, who are so accustomed to hear of and see what they are told in "Spanish point," if I say that Spain cannot be identified with the making of ornamental and fine white thread lace, as are Italy, Flanders, and France. Señor Riaño, an authority in these matters, writes that, "The most important ordinances relating to Spanish industries are those

lace even alluded to." A Friar, Marcos Antonio de Campos, 1592, preaches, "I will not be silent and fail to mention the time lost these last years in the manufacture of 'cadenetas,' a work of thread, combined with silver; this extravagance and excess reached such a point, that hundreds and thousands of ducats were spent in this work, which, besides destroying the eyesight, wasting away the lives, and rendering consumptive the women who worked it, and preventing them from spending their time with more advantage to their souls, a few ounces of thread and years of time were wasted with so unsatisfactory a result." Señor Riaño seems to argue from this that the Friar adopted "cadenetas" as a term meaning lace-work. But, further on, he says "cadenetas" is chain stitch. Bearing in mind that the fashion of the 16th century directed its-self towards "points," and "dentelles," and bands of insertion of lace-work, it might seem perhaps more likely that the Friar would have consumed such adornments with the fire of his wrath naming them by their proper names—like "puntas," "randa," and "entredos." The Friar "puntas," "randa," and "entredos." The Friar may, no doubt, have been inveighing against a sinful extravagance in the use of some sort of embroidery; I do not think, however, that we can safely rely upon what would be a misapplied term, as proof that Spain made lace; that she embroidered is well-known. Whilst the female portion of his family embroidered, Cervantes, it is said, wrote much of his "Don Quixote."

XXI. Ornaments made of plaited and twisted gold and silver threads, much in the way that some lace was made, were produced in Spain during the 17th century. Mention of those is to be found in the ordinances of that time. Towards the end of the century, Narciso Felin, author of a work published in Barcelona, quoted by M. Aubry, writes, that "edgings of all sorts of gold, silver, silk, thread, and aloe fibres are made at Barcelona with greater perfection than in Flanders." In the 16th century Flanders was part of the Spanish dominions. She is then always spoken of as Spanish Flanders. To her, Spain was indebted for a quantity of manufactured and artistic goods, linen and lace included. I conclude, therefore, that the Barcelona lace-making was more or less an imitation of that which had pre-existed in Spanish Flanders. Apart from this, the gold and silver lace of Cyprus, Venice, Lucca, and Genoa, preceded that from Flanders. It appears to me that Spain was later in the field of artistic lace-making than Italy, Flanders, and France. As a great commercial and wealthy power, Spain, I think, in the 16th and 17th centuries, imported the greater portion of the fantastic and fashionable luxuries she required. Even the celebrity of the gold "Point d'Espagne" is due, I fancy, more to the use of gold lace, by Spanish grandees, than to the production in Spain of a gold lace, better in design, in workmanship, and quality, than that from Italy and France. The manufactories at Paris and Lyons were in full force, supplying the fashionable world with gold lace in the 17th century. The name "Point a'Espagne" was, I think, a commercial name given to gold lace by French makers. It is published at Toledo and Seville in the 15th and interesting to note that Beckmann in his "History 16th centuries, and at Granada in the 16th and of Inventions," says that it was a fashion to give 17th centuries, and in none of them do we find the name of Spanish to all kinds of novelties,

such as Spanish flies, Spanish wax, Spanish green, Spanish grass, Spanish seed, and others. This in a measure establishes the value set upon the qualification or title "Spanish," and, at least, indicates that the custom of Spaniards was much courted by other nations. In concluding these observations as to claims that Spain may have for being considered an early maker of artistic lace, I may quote the following passage from Señor Riaño, which greatly affects the value of what would otherwise be a fact of importance contained in Mrs. Palliser's "History of Lace":-

"Notwithstanding the opinion of so competent an authority as Mrs. Palliser, I doubt the statement, finding no evidence to support it, that thread lace of a very fine or artistic kind was ever made in Spain or exported as an article of commerce during early times. The lace alb, which Mrs. Palliser mentions to prove this, as existing at Granada, a gift of Ferdinand and Isabella in the 15th century, is of Flemish lace of the 17th century."

XXII. Of France and her connection with early lace-making, there is not much at present to be said. It is evident that a great deal of foreign lace, chiefly from Flanders and Venice, were imported into France, and that all sorts of prohibitions were issued to prevent the expenditure of the French upon foreign goods, and so, if possible, to encourage the manufacturers to make articles for home consumption; but the importations went on, and France was at this time unable to make laces to compete with those from Italy and Flanders. The compilers of commercial dictionaries and encyclopædias, Diderot, Savary, Roland de la Platiere, and others, writing in the 18th century, give the names of insignificant little primitive twistings and plait-ings like "gueuse" "mignonette," and "campane." These bear about as much relation to fine artistic laces as a flint instrument does to a Cellini's sword-handle. Taste in manufacturing lace in France was not evoked until Frederic Vinciolo came to Paris about the end of the 16th century, and supplied the Court of Henry IV. with varieties of white thread work, including the geometric points of Venice. But even Vinciolo's influence was limited, and only laid the seeds of a condition of taste in France, which enabled Colbert forty years later to induce Venetian lace designers and workmen to come over to France and to help in the establishment of a number of places where lace should be regularly made. Many of the towns nearest to Flanders were judiciously chosen for these new lace establishments. But the chief of the French towns subsequently most famous of all for its lace was Alençon in Normandy. the influence of Alençon we shall hear more in the course of our investigations of needle-point lace making

XXIII. Of incidents concerning workpeople engaged in the manufacture of lace, we have little precise information. History is almost silent in respect of guilds, or bodies of lacemakers (if there were such) in the 16th century. Venetian archives might be expected to reveal some light upon this; but at present the search has not been very fruitful. Documents exist to show that a noble lady Bianca Capello, was able to monopolise the making of certain laces for her own use, in 1578; and that in 1582 Juan Isepo worked a splendid collar, very likely of Reticella work, for Maria Morosoni di Francesco. A note is given in Alençon factories were established.

a pamphlet by Signor G. M. de Gheltof, of the foundation of a school of 120 lacemakers at Venice,

by Morosina Morosini, in the 17th century.

XXIV. Valuable State records, from which
some information might probably have been
obtained about the Flemish lace trade, were
burnt in a fire at Brussels in the year 1731. Private papers of nunneries in Italy and Flanders would probably be an interesting source to examine. Evidence, such as it is, points to lacemaking having been at first an occupation of individual peasants, rather than of organised bodies of persons. Nuns in convents no doubt produced a good deal of lace, as well as children in schools; and by Italian trimming makers and French guilds of "passementiers," probably much lace of a primitive kind was made. Lace of later periods, that is, from the middle of the 17th century onwards, can generally be identified with centres of manufacture, like Valenciennes, Mechlin, Brussels, Alençon, Honiton, &c. But of the earlier laces, excepting those done according

to Venetian patterns, we have not much to rely upon for guidance.

XXV. The 16th century Italian patterns are sometimes named "punto Fiamenghi," "punto Genovese," and "punto Francesco;" but there is little variety in the style of the patterns, so that the names, even if they meant more than the celebrated "Point d'Espagne," do not give us new clues as to other centres of manufacture if they existed. These names were apparently pattern - makers' names for styles, intended to catch the fancy of the different people to whom they were dedicated, and may have been made in various towns in Italy, such as Rome, Venice, Genoa, Milan, Piacenza, and elsewhere. I am afraid, therefore, that much of the classification of early lace has to be somewhat vague.

XXVI. An elaborate design, for instance, is hardly likely to have been worked out by humbly trained peasant hands; it is more likely to have emanated from some place where workmen and women were employed for the purpose of lace-making, and where they had access to good patterns, plenty of materials, and so forth. Such conditions existed probably also in Italian and Flemish convents. On the other hand, simple patterns would, from the ease with which they could be executed, recommend themselves to makers of the less important laces, whose operations would have a tendency to become restricted to the repetition or modification of such simple designs, the sale of which would no doubt take place amongst the villagers, or else be promoted by some Autolycus, and such hawkers of wares, at fairs and markets.

XXVII. The excellence of much of the early lace is perhaps due in a great degree to the good taste of the wealthy, who bought and wore the work. Demand ruled supply, whereas now-a-days, supply seems to rule demand so far as beauty of design and quality of workmanship goes. There are few Mecenases now. The recommendation of the salesman is a chief moulder of public taste. The salesmen in turn regulate the style and quality of the goods to be made, according to their opinion of public taste and fashion. Such relations do not seem to have existed when the great

wealthy lace wearers, then, at that time, the number of lace workers was insignificant as compared with the number now. One might say that lace wearers could be counted by the thousand, whilst those not wearing laces were the millions. This is now almost reversed. The millions now wear lace, or something like it. Louis XIV. and Colbert determined that French taste in lace should be good, and virtually took into their own hands the supply of lace to the country. From Alençon were sent out admirable patterns and exquisite workmanship, which were readily accepted by lace fanciers. Brussels unquestionably adopted styles of Alençon designs for her pillow laces, which in time superseded French needle-point laces. Our English pillow-lace workers adopted some of the Brussels patterns and some of the Mechlin; but English taste was easily gratified by less skilfully arranged patterns, and found sufficient pleasure in the peasant laces of Buckinghamshire and Devonshire. It is these patterns that a good deal of the machine-made lace imitates, though within the last three or four years there has been a marked phase of other more ambitious imitation in the machine-lace trade. Something akin to the rich patterns of ancient hand-made lace is now made by the machine, and to the majority this substitution of machine-made for hand-made goods is satisfactory. As a rule the difference between machine and handmade lace is not detected by the many. If there is a difference, to some it is that machine-made lace, from some points of view, is the more wonderful and more to be prized of the two sorts of work. Setting aside any prejudices one may have, and reviewing the variety of forms wrought years ago, we may consider some of the circumstances of the production of laces. Sometimes laces were made in dim and dank cellars, so that the soft fragile threads should retain their elasticity, and not become brittle. A ray of light alone was allowed to fall Abney, R.E., F.R.S. anjan's dies, F.R.S.

separation of the common to supply the product of the produ congented from some place where workeneds and wonder were employed for the propose of lace-making, and where keep had access to good patient, placity or natocals, and an toth. Such conditions existed probably also in itsular and patients would, from the east with which they patient would, from the east with which they could be excented, recommend themselves to do the sopretion of the such simple that would have a bandency to become restricted to the roperation or modification of much simple dearms, the cale of which would no doubt take also amount the allegers, or else to promoted also amount the allegers, or else to promoted at this and makely and such baselines of wares of a trait and makely.

upon the workwoman's cushion. What an expense of eyesight and health must then have taken place. Compare truly costly works produced in such circumstances, with the low-priced repetitions done in taut wiry cotton threads which grow with precise monotony of pattern in the bustle and clatter of machinery, at the expense of iron and steam, and one is perhaps inclined to be glad at the release of human labour from penalties like those which formerly accompanied lace-making. I do not think anyone can well say what may succeed to the mechanically devised and produced materials now called lace? They seem to satisfy present demand and to reflect the taste and ability of the age. Is it vain to hope for a revival of hand-made works? Is the time to arrive when machinery shall have exhausted itself in its endeavours to infuse into its productions the quality of handwork-or has a period commenced when people shall be contented with mechanical instead of manual art? and so from this possibly pass on to a condition of indifference to fine artistic works of handicraft, which not many years since were reported to have been pronounced by a philosopher and leader of opinion to be but the rubbish of human labour.

XXVIII. In my next lecture I hope to deal with the various needle-point laces, and besides the examples shown on the screen there will be a few fine specimens of lace, and some photographs. I must not conclude my remarks this evening without acknowledging the advantage I think both you and I have received from Sir Philip Cunliffe-Owen, director of the South Kensington Museum, who kindly caused many of the transparencies of lace to be made, as well as from Sir William Drake and Mr. Edmund Dresden, who lent specimens, some of which have been exhibited, and others photographed, by Sergeant Jackson, R.E., the able assistant of my friend, Captain

LECTURE II,-Delivered Monday, April 11, 1881.

Needlework upon a material. Needlework upon separate threads. Venetian needle-point lace. Needle-poin French needle-point lace-making centres. English and Flemish needle-point lace.

I. In my previous lecture I tried to show when the art of lace-making arose, and by whom it was first practised. This evening I propose to deal with one of the principal methods of lace-making, and the designs worked in this method. Lace, as an ornamental and open arrangement of threads, has been and is still produced in various sorts of threads. We have laces of gold and silver threads, of white, black, and coloured silks, and of white threads, which latter may be of linen or cotton. The white linen thread lace is that in the production of which most notable artistic designs have been used. Accordingly, with this particular class of lace, I propose mainly to deal. Broadly speaking, hand-made white thread lace is a textile fabric perfectly distinct in character from a woven textile fabric. As a rule, a woven material is close, and patterns are wrought in it by varying the interweavings of the threads, and by using variously-coloured threads.
II. Now, hand-made lace is produced by looping,

or plaiting, or twisting threads together. The looping is done with a sewing needle, and the thread, by means of the needle, is constantly at work, being twisted and looped around and between certain fixed threads, which form the backbone of the pattern to be wrought. Plaiting and twisting is done by using several free and loose threads one after another, so that single threads are by turn brought into operation. This latter method comes under the heading pillow and bobbin-made lace, and with this we shall deal in the next lecture.

Fig. 1.



Valenciennes pillow lace.

For the present, we are to consider the looped and twisted thread work done with a needle, and hence called needle-point lace. Needle-point and pillowlaces are the two chief divisions of the hand-made Palliser, whose name is closely associated with

laces. Without some acquaintanceship with the methods of their productions, it would be difficult to detect certain of their salient characteristics. To the sight, the difference between these two classes of lace (pillow and needle-point) is often quite marked. For instance, one may compare a piece of Valenciennes pillow-lace with a piece of Venetian needle-point lace. The Valenciennes pillow lace is quite flat and thin in appearance, whilst the Venetian needle-point lace is marked by portions in relief and a sort of modelled appearance. (Figs. 1 and 2.) A similar difference would

Fig. 2.



Venetian needle-point lace.

not be apparent if we compared the same piece of Valenciennes with a very delicate Venetian needle-point lace, called "point de Venise a réseau." The variety of pattern which we should find in three such specimens could not even be taken as a guide to class of work, as respects needle-point and pillow-lace, since, in the haloyon days of lace-making, the same pattern might be worked by the needle and on the pillow.

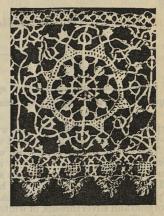
III. Attention to the characteristics of workmanship in laces has often been too slightly paid by those who have otherwise shown themselves to be con noisseurs in the matter. The late Mrs. Bury.

the history of lace, not unfrequently had failed to is separate threads. This is quite reverse of emacquaint herself with such characteristics. She broidery, which requires a stuff as a foundation. described some needle-point lace as pillow-made lace and vice versa. It would be ungrateful on my part if I allowed you to infer from these remarks that I was not sensible of my indebtedness to Mrs. Palliser's "History of Lace." Her patient research was almost exclusively devoted to the exhumation and laborious accumulation of records about lace. In this respect chiefly her history of lace is a valuable volume of reference. I must repeat, however, that records and writings hardly seem to be a first source from which materials for forming an acquaintanceship with lace-making are to be drawn. The abundance of existing specimens of all sorts of lace invites our attention, and enables us to trace developments and phases of the art in its productions. When methods of workmanship and styles of design have impressed themselves upon us, then we may have recourse to records and writings, and fit together in as complete a way as we can, the evidences we have thus obtained. I will not say more on this matter, but proceed now to ask you to consider with

me features of workmanship in needle-point laces. IV. Without referring to any particular class of needle-point lace, it will be seen that a beginning must be made somewhere. The pattern governs this beginning. Say then we want to make a little square in lace. We first draw the form on a piece of paper or parchment. Parchment being less destructive is the best. Then lay upon the lines a thread which is fastened here and there to the parchment by stitches. Having completed this thread skeleton pattern, we begin to build a compact covering of white threads upon it, which we do in ordinary button-hole stitch, the result of which is that the skeleton outline becomes a wellmarked figure. This is the very simplest form of needle - point lace. If we want to go a little further, and place, say, a pattern in the centre of the square, we should draw one pattern, and then outline it with thread, taking care to attach the lines of this addition to the main lines of the square, and then we proceed with one over-casting of button-hole stitches. There remains now the question how the pattern is to be taken off the parciment. This is easily done, by neatly cutting the stitches at the back of the parchment, which stitches you will remember were those which held the first skeleton outline down. The lace is thus released from the parchment, and the pattern is ready for use for another piece of lace. However, all that we have done is to produce a sort of geometric form of even lines, and this is virtually all that was done at the commencement of needle-point lace-making. Much depends, as you readily perceive, upon nice thread and careful patient working; the least scamping or putting a loop out of its order, takes away from the compactness of the work; and irregularity and loosely made lace condemns itself.

V. Before leaving the early and geometric stage of lace, as we have seen it, which, by the way, was called "punto in aria" (see Fig. 3), a term you will recollect from my first lecture, I think we may find it useful to glance at a few of the classes of white thread embroidery

Fig. 3.



"Punto in aria."-Geometric design, with an edging of plaited and twisted threads.

VI. When the fashion of ornamenting white linen garments was getting up to its zenith, people devised methods of decoration other than that of merely loading the surface of a stuff with embroidery. A lightness was obtained by cutting out bits of the stuff, or by punching a series of little holes, like the tailor bird. One of the more elaborated forms of this cutting-out work was 16th century Venetian "reticella," which is also called some-times "tagliato," or cut work. The designs for this sort of work, difficult to distinguish from much "punto in aria" done from similar patterns, are also geometric. The principal lines are rectilineal, and this arises from the fact that the cuttings-out from the stuff generally followed the woof or warp of the linen. These rectilineal lines consist of either very narrow strips of linen, or three or four of the uncut threads, worked over with button - hole stitches, just as our skeleton outline in "punto in aria" was secured. Between these lines may be circular and radiating forms, which were worked like "punto in aria;" and it is curious to notice that, although the embroiderers of linen soon devised methods of inserting into places cut into linen such open ornamented work as done in Fig. 4,



Englarged diagram of stitching in close portions of needle-work

yet they seem to have been some little time before they were able to work this sort of ornament, so as to form a band or trimming, independently of linen as a foundation.

VII. Another cut or "tagliato" work done with linen was of a very obviously cut character, as you see from the specimen here shown. This vandyked scroll is cut out of a strip of linen, which existed before, and contemporary with "punto and is picked out with fine gold wire, fastened in aria.' We have seen that the beginning of lace along its edges. (Fig. 5.) The name "tagliato a

foliami," or cut work with leaves, was given to a very rich kind of lace, and this has led to some confusion; as the term "cut" indicates a process

Fig. 5.



Vandyke of cut linen work.

having nothing to do with the making of lace like that of Fig. 2, which was, nevertheless, called "tagliato a foliami." Much as it may look like cut linen, with little reliefs and ornaments embroidered upon it, it is a fine specimen of very elaborate lace-work, produced entirely by needle and thread upon a parchment pattern, so that cutting has nothing to do with the shaping or ornamentation of the

pattern.

VIII. Continuing with the white embroideries upon stuff, we may look at a specimen of drawn thread-work. Here we have another sort of work, differing from either of the cut works. The withdrawal of the threads regulated the pattern to be produced. A well-curved scroll had to be content with being approximately rendered in small squares. The back ground to such work appeared to consist of a net of square meshes. This effect was obtained by whipping fine thread around the undrawn threads of the stuff. Just the reverse of this work is the very well-known darning upon net, of which there are many machine-made imitations now. For this sort of work, Frederic Vinciolo made many patterns, some of the earliest of which date from about 1570. The Italian name for the work was "punto a maglia," and the French "lassis" or "lacis." The Italians, or rather Venetians, preceded the French in this sort of work, though the French carried it to a degree of admirable perfection. I remember that in the South Kensington Exhibition of 1874, there was a most complete specimen of this darned work, a large linen curtain, or altar cloth, set with squares of darning upon a net ground, in which were represented figures of the zodiac and of the seasons.

All of them were after designs by Vinciolo, as may be seen in such well preserved copies of his works as those belonging to Mr. Alfred Huth, who kindly allowed me to consult his copies of them. It was particularly interesting in this church hanging to notice the final squares, in one make one mesh. I will show you a few meshes

Louant Dieu j'ai fini mon ouvrage, "praising God I have finished my work," and in the other the name of the worker, "Suzanne Lescallez, 1595." The cloth, after the Exhibition, went back to The cloth, after the Exhibition, went back to France, and I don't know where it is, but it is so complete a specimen, that if by chance any one happens to meet with it, I hope they will make a careful note of its whereabouts. On a far smaller scale, and of altogether less artistic importance, are the few squares of "lacis" or darning, introduced into this cloth. Fig. 6.) Those appear to be reproductions of some

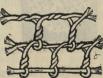




Corner of an embroidered linen with squares of "lacis" and "Reticella" inserted, and edged with twisted and plaited threads

of the smaller designs by Vinciolo. This Vinciolo is an important personage in the history of lace. Besides the darning work, or "lacis," which is not lace, he popularised the taste in France for "points coupes," the French name for "reticella" and cutwork, and also for "punto in aria." He seems to have borrowed much from different sources, and it is interesting to compare his patterns with those done by C. Vecellio, a notable and rather later designer and writer about costume towards the end of the 16th century, and some relation to the great Titian, and with those done by a much-esteemed woman, named Isabetta Catanea Parasole, whose patterns were published in Rome about 1590 and early in the 17th century. No doubt Vinciolo owed much of his success to the patronage which Henry III. and Henry IV. of France and the ladies of the French Court accorded him, though, at the same time, we must not forget that he was a man of energy and refinement, as his books show. He is almost the only early pattern maker who attempts a description of how the patterns are to be worked. His descriptions, however, are more enthusiastic than instructive. They are given by him in verse, in what he calls a discourse upon "Lacis." His divine chef d'œuvre is not a matter of chance; it has been well considered and planned by number and measure. Before leaving the "lacis" or darning on net, I would observe that the name given to the net was "résuil," and this name must be noted, since we find it, later on, applied to ground-works of meshes used in laces. You, all of you, know what netting is, and how simple an operation it is to

Fig. 7.



of which were the words, most carefully darned, done with the needle (see Fig. 7), and you will

then see the far greater complication of this work, as compared with netting, and yet the name

"réseau" in France applies to both.

"réseau" in France applies to both.

IX. We have now examined different sorts of embroidery on linen. (1) Work done by cutting holes into a linen foundation; (2) work done by cutting linen into shapes; (3) work done by drawing out threads, and so leaving a linen pattern; and (4) work done by darning a pattern into network. We have also seen specimens of the early geometric laces—the "punto in aria," or button-hole stitch work done upon a thread skeleton; and now I should like to show you a piece of mixed work in which a little more than more of mixed work, in which a little more than mere geometric form is displayed. (See Fig. 8.) The

Fig. 8.



Vandyked border of mixed work, the upper part of needle-point, the lower and dentated part of plaited and twisted threads.

upper part is all of needle-point work, whilst the lower is of plaited work. Some of this plaiting may, no doubt, have been done with a hooked needle. However this may be, I thought it useful to show this specimen, in order that you might not fancy that the whole of a single piece of early work was done in one method only. Patterns for lace like this are to be found, especially in Vecellio's books, about 1590 or 1600.

X. We will now look at a few specimens, from which I think we shall trace a freer sort of design, and, consequently, an increased display of ingentity in workmanship. We have hitherto seen ornaments, more or less dependent in their construction upon squares and their diagonals. But the pattern-



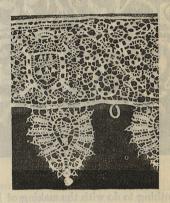
Italian needle-point vandyke.

books of the end of the 16th century give us designs for scrolls, with the introduction of all in the fine gold and white flounce of Sir William kinds of cdd figures to be worked in lace. The Drake's. Parts of the pattern are diversified by

specimen of this class (see Fig. 9.) dates, probably, from about 1580. I want you to notice how the different details in the design touch one another at different points of contact. There are very few little tyes. Considerable parts are of flat-looking work, work which in this photograph looks like linen. It is composed of a series of closely-drawn loops worked very much as shown in Fig. 4.

XI. In the specimen in Fig. 10, I want

Fig. 10.



Needle-point lace, showing use of tyes or "brides."

you to notice the numerous little tyes which are used to hold the pattern together. These tyes are called "brides." The design too of this piece is more vivacious than the simple rosettes and radiations. In the centre we have a shield surmounted by a crown. Curves slope from each side of it, to meet beneath a sort of fan pattern, from the top of which grow a little fleur de lys. The vandykes which hang beneath, are repetitions of this fan device, and are terminated with little balls. Between the vandykes are small loops, which suggest loops for buttons, but I cannot say for what particular use this specimen was intended. From the character of the design I think the specimen dates from about 1580 to 1590, and is Italian. It might, of course, be a French or other imitation of Italian work.

XII. Very important work of this flat character was made, and amongst the white threads gold threads were introduced. I believe that Sir William Drake possesses as fine specimens as ever were wrought of this white and gold thread needle-point lace. They are, I think, of early 17th century design and workmanship. Originally they came from Messina, to which place they may have been taken by some wealthy person at the time when that city was a centre of considerable importance, notable for its independent and aristocratic prosperity.

XIII. In the succeeding examples, you will notice a development of flowering stems and scrolls. A change of design had thus begun to take place at the end of the 16th and beginning of the 17th centuries. Here (in Fig. 11) you will see too a greater use of the "brides" than any we have previously noticed. Along the borders of the stems or scrolls is a little raised line. This is called the "cordonnet," a feature not observable changes of stitch. Instead of compact work every- borders, which appears in a lace (see Fig. 14) much of some of the little blossoms there are wheels and century. The points of resemblance lie in the

Fig. 11.



Venetian needle-point lace.

radiating lines. These details are worthy of our attention, and are called fillings-in, or "modes." They are specimens of the first forms of elaboration in lace, which in their further matured state became important features, giving delicate grace in appearance to laces of the best period.

XIV. It may have been about this time, namely, the commencement of the 17th century, that lace workers pressed tape into their service. Instead of patiently composing their scrolls and flowers in button-holed stitched fabrics, they found tape could, for comparatively rough and ready general effect, answer their purpose. Here we have two

Fig. 12.



Tape lace, with needle-point work and an edging of plaited and twisted threads.

examples of tape lace combined with needlework. Workers in pillow lace also used tape in a similar way. This little strip (see Fig. 12) may be Italian,



Tape lace worked with the needle.

where we should see little open works. In the centre liked by the Flemish in the first half of the 17th

Fig. 14.



Flemish lace of the 17th century.

arrangement of the petals of the blossoms, which

takes a fan shape.

XV. Before leaving the question of tape laces, it may be well to state that the weaving of tape seems to have been begun in Flanders, about the end of the 16th century, or the beginning of the 17th. Tape, so far as I have been able to ascertain, did not come to be made in England until the 18th century, when, according to a note I have had from Messrs. Phillips, the well-known tape manufacturers at Manchester, their predecessors brought over, in the year 1747, two Dutchmen, of the name of Lanfort. Under the tuition of these Dutchmen, the people in the village where Messrs. Phillips have mills at the present time, learned how to weave tape in the loom. The start in England was up-hill work, because of Dutch competition. There were at least 1,000 looms at work in Holland before there was one in England. However, in about thirty years, the trade greatly developed, and, in the course of a half century later, several other tape looms were started. This was about 1820. Since then the manufacture has increased. Before 1822, tape was made in cottages; but, in or about 1822, the idea of getting the workers and their looms under one roof had taken root, and mills were built. Then came steam power and water power for driving the looms, instead of human power. Effective work has been done with tape, in connection with the method of pillow-lace making. Work of this sort is sometimes called guipure. But guipure is a class of work totally distinct from this, and about guipure we shall hear something in the next lecture.

XVI. However, we must now return to needlepoint laces. Up to the present we have arrived at scroll designs more or less flatly worked, held together by tyes or "brides," enriched with little varieties of "fillings in" or "modes," and emphasised with small raised lines or "cordonnets." All this sort of work was done upon a thread skeleton pattern just as the first needle-point laces were made. Fancy in design and workbut tape lace was not only produced in Italy. This specimen (see Fig. 13) may not unlikely be of Flemish workmanship. My reason for thinking it Flemish is the style of the flowers along the workers produced beautiful solid looking work, which is almost like fine 14th century Gothic tracery, carved in ivory. Its exquisitely worked relief carried recent admirers of it far away from the time when it was first produced. They tried to identify it with a needlework which an Italian poet, Firenzuola, a hundred of years before the existence of this relief-lace, described as "sculptured in relief." As the size of the altar-cloth, flounce, border, or collar seemed to demand, so did the lace-workers vary the size of their designs and work. For instance, a collar would be designed and worked as this one. (See Fig. 15.) The

Fig. 15.



Part of a collar of minute Venetian needle-point lace.

figure is not quite distinct, in showing the amazing delicacy of the relief work and its enrichment. Each of these little blossoms, actually about the size of sixpence or threepence, is a bouquet in itself of hundreds of the most finished lilliputian loops, finely worked in button-hole stitches. Again, for a border or an ornament to hang beneath the chin, we have specimens such as this (see Fig. 16),

Fig. 16.

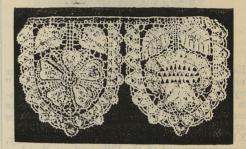


Venetian needle-point lace.

and in this specimen the decorations worked upon the little tyes should be noted; while, for a sort of collar, the ends of which spread flatly over the breast of some courtier or minister, say like Colbert, we have samples as shown in Fig. 2. In all these specimens is a rich expression of stately scroll design—varied fillings—in or "modes," "galleries," or successions of minute loops "picots" placed one above the other. This was the kind of splendid needle-point lace, exclusively originating, I think, from Venice in the 17th century, which the nobility and wealthy personages of the time wore, and of which vestments and altar-cloths were made for churches.

XVII. A contrast to this galaxy of wonderful lace is to be found in the needle-point lace of England during the 17th century. A photograph lies on the table, in which is shown various scallops on vandykes of English needle-point lace of the 17th century. Remarkable amongst them are the two larger vandykes, which you will see contain—the one, a figure of a man—the other, a figure of a woman, depicted in the costume of the period. The way in which this work was done is precisely similar to 17th century flat Venetian needle-point lace. Here is a specimen of the English work. (See Fig. 17.)

Fig. 17.



English needle-point lace.

XVIII. Scallops of "punto in aria," insertions of "reticella," and of similar design, may also be seen in Westminster Abbey carved upon the tombs of the

Fig. 18.



English sampler with needle-point stitches.

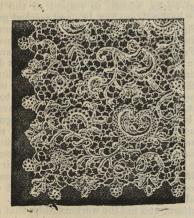
infant daughters of James I., which are dated 1606 and 1607. Who may have made these, who can say? In the English sampler of lace stitches (see Fig. 18), we have, luckily, the maker's name

and date. "Margreet May, 1654" wrought this sampler, and in it you will see cut-work, drawn linen work, "reticella" work, and "punt in aria," or true needle-point stitches. It is a most valuable little epitome of English lace work in the Puritanical times, when school children like "Margreet May" were trained to have an interest and to take a pride in their own labour. Such as she were, evidently, not to be extinguished by a mere registration number, or lost in the midst of numerical grades in some "standard."

XIX. I must now ask you to put yourselves twenty years or so back before this 1654, and to consider the position up to which we seem to have traced needle-point lace making and design.

XX. The little tyes holding the patterns together have hitherto been but arbitrarily arranged. We have seen that at first they were plain little lines, as in Figs. 10 and 11; we have noted the decoration of them by means of the addition to them of little loops or "picots," as in Fig. 16. We now come to a period when the designers arranged them into an orderly pattern, similar to the honeycomb of the bee. Messrs. Hayward have kindly lent a very remarkable flounce, in which this character of honeycomb ground is seen, and Fig. 19, is taken from smaller specimen, which was

Fig. 19



Venetian needle-point lace.

used as the veil to a chalice. The little tyes ornamented with small loops form a background of The style of design is no longer the flowing and dignified scroll, but consist of a balanced arrangement of fragmentary details, in the ornamentation of which clusters of picots is noticeable. A similar style in using disconnected ornaments is observable in Messrs. Hayward's

XXI. But before quitting the long flowery scrolls, I want you to observe the varieties of fillings-in, the growth of which we had begun to notice in Fig. 11, and I again refer you to the collar of raised scroll work. (See Fig. 2.) At the same time that new effects were being tried by designers and workers, the best forms which had preceded these attempts were also preserved in use. Hence you will see that, although in time styles of design supplanted one another, borders of the ruffs, became unmanageable for such

there were lingerings of old styles contemporaneously worked with new styles. And it is the consideration of incidents like this which I think must always puzzle connoisseurs of styles of ornaments in their attempt to give a very precise date to a certain pattern. We may know that such and such a pattern may have been worked at a certain date, but we cannot fix with precision its first introduction, or its final appearance, neither can we be confident that a repetition of it may

not be of very later date.

XXII. With the style of balanced arrangements of detached ornaments which is closely connected with the style known as Louis XIV., we find the first indications in lace of a groundwork of meshes made with a needle. (See Fig. 20). This

Fig. 20.



Needle-point lace with ground of fine meshes.

figure is rather indistinct, and does not show the ground of meshes clearly. Perhaps, however, the indications of it are sufficient to let me ask you to take my word for it that the ground is composed of meshes, which are in the main similar to

those of Fig. 7.

XXIII. You will hence note how that we are getting into a period when grounds of meshes were being used. The daintiest of all Venetian needlepoint laces, with fine grounds, is the "Point de Venise a réseau." This most delicate work was contemporary with soft pillow-made laces, which no doubt were intended to be its rival. In its production were combined the highest elaboration of design and workmanship, together with a thinness and beautiful softness of texture. It is one of the rarest of all laces. It marks a transition from preceding heavy to succeeding light laces. It followed the change which articles of costume, like collars and cuffs and trimmings, underwent from the 16th to 17th centuries.

XXIV. High-standing ruffs, like those worn by Queen Elizabeth, had been trimmed with "reticella" and geometric "punto in aria." But the vandykes expanded in size, and instead of shooting off from use, and so began to lay down, falling over the shoulders, instead of starting from them. The size of lace-trimmings grew too. Instead of vandykes or "dentelles" pendent from the knee or along the edge of a skirt, whole flounces offering greater field for display of more ambitious designs were produced. The Dauphin of Louis XIV., when christened, is pourtrayed as having worn a mantle with a deep bordering of handsome scrolls of raised Venetian point similar to that in Figs. 2 and 16. Tabliers and aprons of ladies' dresses were similarly composed of such lace. As patterns and work became less cumbersome, ladies adopted expansive sleeves of delicate lace, which well became their soft arms. A degree of softness thus asserted itself, and a climax of this softness is to be found in the remarkable "Point de Venice a réseau." The old vandykes had, in fact, disappeared, though their name, "dentelles," was retained for their successors, from which the dentated character was almost entirely extinguished.

XXV. We have now arrived at about 1660 to 1680, and this is an important date to remember in

connection with the history of lace.

XXVI. A view of the situation might be stated to be, Venetians, at the end of their famous hundred and twenty years of work, to bring lace to a perfection, and other countries doing their utmost to acquire the art from them; some, like the Flemish, progressing slowly and naturally, following Venetian patterns upon the pillow; others, like the French, bent upon stepping by any

means to a front rank.

XXVII. The desire of the French to be able to make fine lace was undoubtedly most strongly expressed in an edict dated 1665. Louis XIV.'s minister -Colbert—was the prime mover. He had taken stock of the increasing love of the French people for Venetian and Flemish laces. His love for the fine arts in all their branches, and his great energy, were principal elements in the framing and issue of this celebrated edict. Through it lace-making establishments were founded at Alençon, Quesnoy, Arras, Rheims, Sedan, Chateau Thierry, Loudun, and elsewhere. The State made a contribution of 36,000 francs in aid of the formation of a company to carry out the work. Instructions were included in the edict that the lacemakers should produce all sorts of threadwork—as much those done with the needle as those worked on a pillow or cushion, in the style of the points which were made at Venice, Genoa, and Ragusa, and other foreign countries. These French imitations were to be called "Points de France;" and although attempts have been made to identify certain laces as "points de France," I think, considering the variety of laces which were to be imitated, and the classification of them under the one name, that such attempts at identification of "points de France" cannot be very successful. As we know well, clever handicraftsmen can succeed in producing counterfeits which defy detection from originals. The local origin of a good deal of lace. made, perhaps, in France, in the middle of the 17th century, cannot, therefore, be determined. I mention this, since Monsieur Seguin has made up his mind that certain Venetian "rose point" laces are French. They are essentially Italian in style of pattern and work. To the extent of their being possibly worked by French hands, they may be French. A French work, re-printed in England, might analogously be called an English book.

XXVIII. An excellent article in the Edinburgh Review of January, 1872, contains some interesting particulars about the establishment of the lace factories in France. The writer was furnished by the well-known antiquary, Mr. Rawdon Brown, of Venice, with extracts from Venetian State papers. A most important incident connected with the starting of these French lace-centres, was the employment in them of Venetian lace-workers. Intrigue and diplomacy were put into action to secure the services of Venetian workers. The Italian Ambassador at Paris in 1671 writes:—"Gallantly is the Minister Colbert on his way to bring the 'lavori d'aria' to perfection;" and six years later, Domenigo Contarini, jealous of the ill-effects which were evidently ensuing, to the prejudice of lacemaking in Venice, alludes to the "punto in aria," "which the French can now do to admiration." Thus, from 1665 to 1677, we have a period when French labour, under State protection, was being systematically trained, by imported Venetian in-

systematically trained, by imported Venetian instructors, in the art of lace-making.

XXIX. The style of design adopted by the French was certainly much more floral than the Venetian. It was lighter, and more in accord with that lightness of texture which lace was developing for itself. Great attention was paid by the French to ground-works, which, in respect of the honeycomb "brides" (see Fig. 19), and meshed grounds (see Fig. 20), they distinctly copied from their Venetian masters. Mrs. Bury Palliser considered that French lace-makers could not be taught to imitate the true Venetian stitches, and that designs for points d'Alençon were planned accordingly to meet this deficiency, but I think the study of a few specimens here before us will be sufficient to show us that, however fresh a departure may have been taken by the French in the matter of design, their cunning in doing delicate needle-point stitches became as great as that of their instructors, the Venetians. It is surprising, I think, how confused people become if they have not fixed in their minds the difference between design and workmanship. The best ability in representing the worst design generally runs a risk of being condemned. the pattern, and not the workmanship, that should be condemned; and very often precisely the reverse of such cases occurs, when a well-drawn pattern, in spite of bad or inferior workmanship, asserts itself, and is then held up as a good piece of work.

XXX. To return, however, to French ground-works, and their particular connection with early distinctive French needle-point laces, you will remember the regular hexagonal grounds of Venetian laces (see Fig. 19). This feature, done generally on a smaller scale, is the distinguishing mark of what was called Point d'Argentan. I am afraid I shall make too great a demand upon your patience if I go into the question why Pointd'Argentan and Point d'Alençon are virtually one and the same class of lace; frequently in style of design, and always in character of work. If you want to see my views upon this question, I must ask you to let me refer to my book on ancient lace, which the Arundel Society published for me in 1875. I will now show you a piece of lace in which the special groundwork of Point

d'Argentan and that of Point d'Alençon appears. (Fig. 21.) The clearly defined honeycomb ground in the centre of the figure is Argentan (so called), and the cloudy ground, composed of fine meshes, is the Alençon ground. Judging from the pattern of this lappet, I think it is likely to be of the latter end of the 17th century.

Fig. 21.



French needle-point lace.

XXXI. The variety of groundworks and fillingsin in the Alençon laces is very remarkable. Large flounces, like one which belongs to Mrs. Alfred Morrison, are rich in all sorts of fantastic devices,

of design, and of work. The underlying principle of the stitchery is the button-hole stitch, worked upon skeleton patterns of fine thread, and sometimes of horsehair. Here is another specimen of Alençon lace. The groundwork is composed of what is termed "réseau rosacé." This "réseau rosacé" consists of little solid flat hexagons of button-hole stitched work set in frames of hexagons. A special characteristic of the Point d'Alençon laces is the button-hole stitched "cordonnet." In the Venetian "Point à réseau" the outlines are of a thread. You will notice this if you examine the actual specimens here shown. To thoroughly enter into minutiæ like these of fine lacework would, I am afraid, take us into considerations almost never-ending. I hope I have been able to present to you this evening a sort of connected chain of phases of needle-point lace-making. I might extend it further, and speak of the Brussels needle-point laces. It is, however, more or less evident that the Elemish or Belging in the matter of a laces. the Flemish or Belgian, in the matter of needle-point lace, imitated their neighbours the French, though no doubt they had imbibed a large amount of knowledge in the course of their far earlier relations with the Venetians.

XXXII. I would conclude my remarks this evening by saying that the basis of all needle-point lace is the button-hole stitch, and that the features of work which you have to detect in judging a needle-point lace from a pillow-made lace are those of this button-hole stitch.

LECTURE III.—Delivered Monday, May 2, 1881.

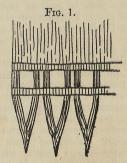
Pillow-made lace. Fibres and threads twisted and plaited to make rope, cord, twine, and braids. Grecian fillets. Twisted thread-work in England in the 15th century. Plaited and twisted thread-work Purls. Merletti a Piombini. Simple work done on a pillow. Manufacture of pins, guipure, tape lace. Pillow laces of scroll design. Grounds of meshes and other characteristics of pillow laces. Italian, Flemish, German, French, and English pillow lace.

I. This evening we are to consider the second division of hand-made lace, namely, pillow-made lace. The outgrowth of needle-point lace from embroidery done upon a foundation of stuff, then upon a web or net of some sort, and at length upon a skeleton pattern of threads, was, I hope, established when we last met. The workmanship of our present subject is quite different. Pillowmade lace is built upon no substructure. It is a representation of a pattern obtained by twisting and plaiting threads. In the midst of the endless combinations of forms inspired by the sight of objects of all sorts, men, animals, flowers, leaves, fruits, as well as historic treatments in depicting such forms, that which in primeval times claimed respect as being a pattern, now seems to relegate itself to a position, which, if not considered to be contemptible, is at least so humble as to pass into insignificance. Nevertheless, students of the history of ornament find much that is admirable and instructive in the simplest juxta-posings of lines and curves. And in glancing at the use of patterns wrought in twisted and plaited threads we must not, of course, omit to note patterns of primitive character.

11. The ancestry of laces made on the pillow may be found in examples of primitive twistings and plaitings of fibres and threads. In my first lecture I alluded to a few such examples, and I hope you will excuse me if I again briefly remind you of them. They must be dissociated from works of the loom. They come into the class of rope, cord, and twine making. They are also nearly related and twine making. They are also hearly related to smaller cords, such as corset laces, sleeve laces, boot laces, and to another branch of the same family, namely, narrow braids and tapes. Rope making was known by the Egyptians in early times, and it appears probable, if not certain, that this property is the same family. that this manufacture was at a similar early date practised by Oriental people living much further west, as in the Hindoo Peninsula, and the immense Mongolian Continent. Amongst the peoples living there, the use of ropes and cords for purely utilitarian purposes was apparently follo wed by the manufacture of finer plaited and twisted cords and threads made of finer materials than rough fibres, such as coloured silks and metallic threads, wires, or delicate metal strips for decorative purposes. These came "in response to the first spiritual want of barbarous man," which, as Carlyle says, is decoration. At what date fringes were used it is perhaps impossible to say. Besides such gold lace, remnants of fringes, there seem to be coeval fine twisted threads covered buried in England.

upon which to string pearls, precious stones, and beads for personal adornment. As well as these we should not forget girdles or cinctures, which come to us from impenetrable epochs of religious myths. Nets of plaited, golden, and silken threads were worn by Grecian women. Fillets for binding their hair and foreheads were often narrow braids made with silken and metallic threads. Müller specifies the diadema, or fillet, which was placed among the hair, and was of equal breadth all round the head. The tænia was usually a broader fillet with two narrower ones at each end. Hercules and athletes are represented as wearing fillets composed of several tenie twisted together.

III. We saw an example of the art of plaiting and twisting cords together for borders, 800 years before Christ in Assyria. But the design of this was quite primitive. This primitiveness of design in twisting and plaiting threads appears to have continued for a long time. A different treatment of borders occurs upon the costume of certain Dacians who are depicted in the famous column, coming before the Emperor Trajan. (Fig. 1.) This is some 900 years later than the Assyrians.



Border from Dacian costumes, sculptures on Trajan's column (2nd century).

IV. Evidences of similar minor details of costume from the 2nd to the 12th century are scattered, and rather difficult to obtain. Something, however, can be gleaned from early Christian sculptures, frescos, and Mosaics, and from Byzantine works of

V. As I mentioned above, the term lace has long been applied to braids and such like. Gold braid especially, or as it is called, gold lace, is of ancient origin. Scandinavians and Danes apparently made such gold lace, remnants of which have been dis-

VI. Before stockings came to be knitted, Romans and Barbarians used to encase their legs in strips of coarse, plaited, and woven material. These braids, as they might be called, were neatly plaited round the leg, from the knee to the ankle, as may be seen in the leg coverings on an early sculpture, probably of the 2nd century, if not earlier, of the "Good Shepherd."

VII. But I must not detain you with these instances of antique plaitings and twistings. We have to arrive at the use of finer twistings and plaitings as they may occur in decorating edges of costume. Refined and graceful little ornaments, consisting very much of small golden and silken threads plaited to form flattened cords, appear to have been common in the early 15th century. These little ornaments are frequently indicated along the borders of dresses and robes, such as those painted by Gentile da Fabriano, Fra Angelico (Figs. 2, 3,



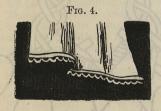
A sketch, with indications of ornament along neck and cuffs, From a painting of Fra Angelico da Fiesole (14th and 15th century).

and 4), and Carlo Crivelli. These names particularly occur to me as I have noted examples of the ornamented work we are considering, in pictures by them.



Sketch of gold thread ornament, taken from a robe painted by C. Crivelli (15th century).

VIII. About the time of these artists, that is from 1387 to 1493, the wearing of linen garments develops. While women wore linen wound round



Sketch of veil, with border of open loops, taken from a painting by Botticelli (15th century).

their heads and necks, the ends falling over their shoulders, men wore scarcely anything which we should now recognise as a collar. A minute indication of an under-linen shirt appeared above the low cut jacket, plaited, or hanging loosely from the neck.

IX. In Holbein's time, which carries us into the

middle of the 16th century, the linen collar had come into fashion, as may be seen from his various portraits. Along these early collars, and also upon the first ruffs, a series of small loops, made of plaited threads, was fastened. This sort of trimming was called "purling," and is similar to the series of loops shown upon the edge of a cloth in Fig. 4. The purse of the carpenter, in the Canterbury tales, is "purled with latoun." Latoun appears to have been a sort of metal-twisted thread. The purling, in its application to collars and ruffs, then, was just the reverse of those Italian thread ornaments depicted by Crivelli and others, which were fastened on to the stuff of the dress, as in Figs. 2 and 3. The purl was open thread work, attached to the edge of a border, and was in use in the 15th

X. An interesting inventory of articles belonging to the Sforza family in 1493 contains mention of a pointed border made with "doii fuxi" two bobbins perhaps, or else knitting or hooked needles. And this pointed border has been much relied upon by different writers as being early pillow lace. I think, however, we might correctly surmise that it was a "purling." And if we may call "purling" lace, then plaited and twisted lace work belongs to the 15th century. It is, however, almost as much a lace as the bolder Assyrian and

Roman fringings.

XI. We need not perhaps here dive into etymological depths for the origin of the word lace. The meaning attaching to it has like that of many other words undergone change. Long before plaiting and twisting had been applied to produce rich and varied designs, the word lace had described the plaited threads used in the manners above mentioned. And of this we have a remarkable instance in an Harleian MS. of the time of Henry VI. and Edward IV., about 1471. Directions are given in it for the making of lace Bascon, lace indented, lace bordered, lace covert, a brode lace, a round lace, a thynne lace, an open lace, lace for Hattys, and such like. The MS. opens with an illuminated capital letter, in which is the figure of a woman making these articles. But her implements are not those with which lace of ornamental quality from the middle of the 16th century and onwards has been made. A clear description is given how threads in combinations of two, threes, fours, fives to tens and fifteens were twisted and plaited together. Instead of the well-known pillow, bobbins, and pins with which pillow lace is now made, the hand was used. Each finger of a hand had the function assigned to it of serving as a peg. The writer of the MS. says that it shall be understood that the first finger next the thumb shall be called A, the next B, and so on. According to the sort of twisted cord or braid which had to be made, so each of the four fingers, A, B, C, D, might be called upon to act like a reel, and to hold a "bowys," or bow, or a little ball of thread. Each ball might be of different colour from the other. A "thynne lace" might be made, with three threads, and then only fingers A, B, C would be required. A "round lace" stouter than the "thynne" lace might require the service of four or more fingers. By occasionally dropping the use of the thread from certainfingers, a sort of indented lace or braid might be made. But when a lace of more importance had to be made, such

as broad lace for "Hattys," the hands of an assistant were required. In the quaint language of the period, the MS. tells us how we should take a fellow and set him on our right or left hand. Thus the worker would have an additional ten fingers or pegs in the two hands of his assistant. For still more important work, two assistants—one standing on each side of the worker-would be required, and so twenty pegs or reels would come into use. A process like this, involving the employment of so many people to produce an insignificant article of luxury, leads us to reflect upon the immense change which has been effected in four hundred years, not only in respect of the improved allotment of labour to willing hands, but also as regards the increased demand and consumption of trivial articles. The very idea of employing fingers as pegs, sounds ludicrous. The unfortunate men or women who passed their time in holding up their ten fingers, cannot have had as much enjoyment out of their work as that which a confirmed player at cat's cradle derives from his strings. Indeed, according to Adam Smith's opinion upon the division of labour, they "must have lost habits of exertion, and become as stupid and ignorant as it is possible for human creatures to become." Fortunately, however, in the little domain of lace-making, conditions like this were not to last long.

XII. The ingenuity of labour in producing ornaments in plaited and twisted cords, or laces, and of curling them in open loops, and such like, along linen collars and cuffs, was not lost upon designers of patterns. For soon after the publication of designs in "reticella" and "punto in aria," we find designs for "merletti a piombini" (Fig. 5). "Merletti" is the Italian for lace work, and

Fig. 5.

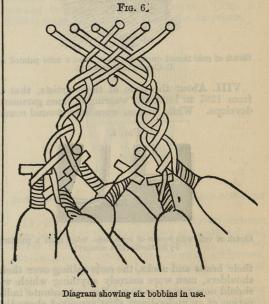


Part of the neck of a shirt, trimmed with "Merletti a Piombini." Italian. Late 16th century.

"piombini" means leaden bobbins. To work a design like that in Fig. 5, it is apparent that implements other than fingers, or even a series of pegs, were necessary. And since traditional practice indicates an origin of implements used, we are more or less forced into an inquiry as to the first employment of the pillow, of bobbins, and of pins, all of which must have been somewhat used for the Venetian patterns of "merlettia piombini" in the latter part of the 16th century. A cushion or pad, on which were fixed stuffs to be embroidered by the needle, was possibly as early in use as the open frame, and this latter was well known in mediæval times and even before then. But an essential of pillow-lace making is the

means of holding in fixed places the little threads as they are being plaited and intercrossed according to the patterns required. This, I think, implies the necessity of pins of some sort. Now, before metal pins were in common use, we had rather the reverse of this process. Instead of the balls of thread being pendent, free to be thrown over the other, and thereby to twist and plait threads into patterns, we saw that balls or "bowys" of thread were, in the 15th century, placed upon fingers, and thus were kept in fixed position, the loose threads coming from them were plaited and twisted. But in pillow-lace making the loose threads from the bobbins are fastened on to the pillow, and the bobbins, with their balls of threads, are constantly thrown about.

XIII. The process of making lace on the pillow is very roughly and briefly, as follows:— A pattern is first drawn upon a piece of paper or parchment. It is then fastened to the pillow. The pillow or cushion may vary in shape. Some lace-makers use a circular flattened pad, backed with a flat, circular board, in order that it may be placed upon a table. Other lace-makers use a well-stuffed round pillow or short bolster flattened at the ends, so that they may hold it between the knees. On the upper part of the pattern are fastened the ends of the threads from the bobbins. The bobbins thus hang over the pattern. The lace worker must be versed in the knowledge of where her fixed points are to be. These fixed points rule the way in which the plaiting and twisting shall follow the pattern. Into these points she puts her pins, as she comes up to them in the course of her work. They are, in lace of simple pattern even, so close together that a dense forest of them is soon massed into a very small compass. Without attempting to convey an idea to you of the growth of such



as the open frame, and this latter was well a forest, I will merely take a simple form, and known in mediæval times and even before then. But an essential of pillow-lace making is the be worked in pillow lace. These fixed points are

mainly necessary for this—one at each angle. Around these points the lace worker would have to work her plaitings. Fig. 6 is intended to indicate this.

XIV. When you look into the minute devices, in which there are forms more complicated than a triangle, you may realise the extraordinary labour involved in pillow-lace making. This, at least, I think, is pretty clear, namely, that the method of making this kind of lace is totally different from that of needle-point lace. Yet often do we so slightly acquaint ourselves with the characteristics of our possessions, that we placidly call a piece of pillow-made lace needle-point lace, and vice versa. Anyone who owns a piece of lace ought to know something of how it was made. A realisation of the pains and troubles expended and caused in producing it should increase our appreciation of it. We may regret the tremendous amount of labour. Still, whether we regret it or not, a piece of lace is a record—proper or improper, but, nevertheless, a record—of labour and time expended. And expenditure of labour and time, devoted either to the production of an ironclad or a bit of lace, seems, I think, worth that recognition which a knowledge of it

forces upon us.

XV. You will have remembered the "purled" edges of plaited thread and silk, and the "merletti a piombini," in making which pins became necessary. Almost coincidently with the development of the "merletti a piombini," the rapid manufacture and use of metal pins seems to arise. A few years ago, the Commissioners of Patents published some abridgments of specifications of patents. And as regards pins, some interesting facts are stated, which are worth quoting:-"Pins formed of wire seem to have been unknown in England until about the middle of the 15th century, before which time they were larger than the present pins, and were made of boxwood, ivory, bone, and some few of metal." In Richard III.'s time, about 1483, there was a prohibitory statute against the importation of pins. Catherine Howard is said to have imported them into England about fifty years later, and at this time Henry VIII. sanctioned an Act to regulate the "true making of pynnes." They were to be well pointed, with heads firmly soldered on to the stems. The price of them was not to be more than 6s. 8d. (or say, about 80s. of our money) per 1,000. Though used as dress fasteners, it is evident, from their then value, that pins cannot have been at all plentiful. The manufacture of them seems to have been of foreign origin, and when once started, it developed fairly rapidly. On the Continent, in Italy, Germany, Spain, and France, perhaps, pins became almost sufficiently numerous for common use about the latter part of the 16th century. And it is at this period when I think we find that pillow-lace making commenced.

XVI. Of the history of bobbins there is not so much to be said. Little bits of wood, bone or lead, would without much special ingenuity be converted into winders for thread. The shape given to bobbins was a result of convenience in throwing the winders full of thread one over the other. An elongated shape is obviously more suited to such a purpose than a reel. An oft-quoted evidence of

pillow-lace making is an engraving by a Flemish artist of the 16th century-Martin de Vos. He drew a series of plates illustrative of occupations throughout the seven ages. One of them is a girl seated with a square cushion upon her lap, apparently plaiting threads. The drawing is apparently plaiting threads. scarcely detailed enough to show the process of the girl's work. A pattern seems to be fixed to her cushion, and six pear-shaped weights or bobbins depend from it. It cannot, I think, be decided that these weight are bobbins. If they are bobbins they are clearly not numerous enough to work such a lace design as that which the size of the roll upon the cushion would warrant one to believe was contemplated. I rather hold to the opinion that the supposed bobbins are weights. In any case, however, assuming that Martin de Vos has drawn a pillow-lace maker at work, his drawing is not so conclusive on the matter as are certain designs by Parasole, published at the end of the 16th century. On these is a statement of the numbers of leaden bobbins to be used for different patterns. Some require 18, others as many as 68 bobbins. Fig. 5 supplies us with a specimen of the sort of plaited and twisted thread-work of the time we are considering.

XVII. Judging from some slightly earlier specimens of nearly similar work, I think that many of the plaited lines in it were plaited separately, in lengths. When a sufficient supply had been worked, then the lengths of these plaitings might be wound round a sort of bobbin. Supplemented by a few other bobbins containing perhaps single threads, a number like 12 or 16 bobbins so charged would probably suffice for working out designs without a multitude of small metal pins. This conjecture is to some extent corroborated by specimens in which we can trace a use of plaited fine cords. The question, however, is somewhat involved, and without wishing to press my idea as to such a method of work, I would merely observe that four or five plaited fine cords used in combination would be but a development of the "purling," which was done with one or two fine

cords interplaited.

XVIII. Before entering into the territory of white thread laces of maturer designs, I should like to make one or two remarks upon a work done with stiffened cords or wires, which in some respects allies itself with wire filagree work. This ornamentation in stiffened cords, seems to be earlier, qua importance of design, than the plaited and twisted thread-work. It was known under the name of "guipure," and was made with gimp. Gimp is a small cord made by closely whipping fine threads of silk or flax, and sometimes little metal strips, round a narrow strip of parchment, or a small bundle of threads, or a wire. It appears to have been in existence in the 15th and 16th centuries in Italy, and France, and Spain. It is an entirely different work from either needlepoint, or pillow-lace making. Patterns were made by laying gimps side by side, or singly, bending them to the shape required, and then holding them together by means of little loops of thread. The stiffness of the gimp also served to retain the pattern into which the gimp might be twisted. In spite of this distinctiveness, Venetian needle-point lace, and many laces in which brides or tyes predominate, have been called "guipure." Some gold

laces are reasonably called "guipures," perhaps, though the greater portion of the gold laces extant are made after the manner of 17th century pillowlace making, and are not therefore, as the true "guipure" is, dependent upon the ductile characteristic of gimp or wire for retaining their

XIX. Returning to pillow-laces proper, I wish to call your attention to the way in which compactly plaited white thread lines developed into flatter lines. An early instance of this we shall see in this specimen (Fig. 7), which dates

Fig. 7.



Plaited and twisted thread-work known as "Merletti a Piombini," About 1560.

from the end of the 16th century. Another development of these flat portions of plaited work may be seen in this specimen (Fig. 8). So flat and

Fig. 8.



Vandyke or "Dentelle" of pillow-made lace. Late 16th or early 17th century.

close is the work here that it looks almost as though a piece of linen had been used, and from it had been cut out the various forms. However, all this is plaited and twisted thread-work done upon a pillow. Somewhat similar to this in respect of work are the passements au fuseau used in France

in the early 17th century.

XX. You will, in the two recent specimens, have observed that the flat portions resemble narrow braids or tapes. Here is another specimen in which what might be called a tape treatment is quite apparent (Fig. 9). We have, therefore, soon come to a period in early twisted and plaited thread lace-making, when means had been devised for rendering broad and narrow forms, fine and heavy lines. In my last lecture I referred to the employment of tape for making ornamental work like lace. A specimen of tape lace, with a ground of meshes, lies on the table.

XXI. The art of pillow-lace making was not

Curved was that of needle-point lace-making. forms, almost at the outset of pillow-lace making, seemed to have been found as easy of execu-

Fig. 9.



Flemish pillow lace. 17th century.

One reason for this, no doubt, is] that the twisted and plaited work was, as we have seen, not constrained by a foundation of any kind. The plaitings and twistings gave the workers a greater freedom in reproducing designs. They could be intertwisted between the fixed points of the pattern with comparative facility, whereas, as we remember, the first needle-point lace workers began their lace with a framework of rectilineal lines. Still the pillow-lace worker did not in the matter of pattern proceed altogether faster than the lace worker with a needle. They virtually kept an even pace side by side. If anything, the pillow workers seem to owe more to the designers of patterns for needle-point lace, than otherwise.

XXII. About the early 17th century, important

designs for plaited and twisted thread-work were produced. Of such I have a specimen to show you. It is a bed-cover, about 4 ft. 5 in. square. Fig. 10 shows a quarter of the design. The

Fig. 10.



Corner of a bed cover of pillow-made work. 17th century.

design is chiefly composed of double-headed German eagles, surmounted by a Germanesque so strictly confined to geometrical patterns as crown, and of insignia of the order of the Golden

Fleece. In the South Kensington Museum it is described as being made of "tape guipure." But this clearly is a misnomer. There is no gimp in it; neither is there tape in the accepted sense of the Although no doubt made in separate portions, afterwards fitted and fastened together, the whole was plaited on the pillow. A revised edition of the catalogue of the lace collections at South Kensington will, I hope, shortly correct the errors I have pointed out. But there is another question of interest attaching to the existing description of this fine bed-cover. It was bought by the Kensington Museum from Mr. J. C. Robinson, who had acquired it in Spain. Its proprietor, a member of a noble family, had a history that it was of Spanish workmanship, and had be-longed to Philip IV. of Spain. Decorated bedcovers were in the time of that king much affected by wealthy Spaniards. But this fact, and the legend, have not convinced me that it is of Spanish workmanship. Because Frenchmen like Stilton cheese, and because we can buy good Stiltons at Chevet's, in the Palais Royal, we don't decide that Stiltons are made in France. In my first lecture I quoted incidents strongly tending to show that Spain had never been a country of importance in the making of lace—at least, at so early a date as that of this bed-cover. Spain published no lace pattern books. Her archives are replete with records of imported laces. She appears to me to have been as a great political and commercial power, unlike artistic and industrious Italy and Flanders. She may have been more like France, though perhaps less artistic; and France, even in the early 17th century, had little prestige in making laces. France later on acquired a renown, when she, or rather her King and Minister, established lace-making centres. I have not yet found out that Spain took analogous steps towards promoting the art of lace-making. Indeed as times went on, her political and commercial power declined with apparently no immediate compensating resurrection of artistic industry. Now, Flanders and Spain, during the 16th and part of the 17th centuries, were under one Government. From Flanders, or as they are called Spanish Flanders, Spain imported most of the laces she wanted. Looking to the excellent completeness of this bed-cover, it seems to me to have internal evidence of being the work of Flemish lace-makers. Had it been of Spanish workmanship we should surely have had other specimens more peculiarly Spanish. And we might have expected to have heard of distinct Spanish laces, just as we have Points d'Alengon from France, Valenciennes, Mechlin, and Brussels laces from Flanders, and Honiton from England.

XXIII. For reasons slightly like these I have given in respect of Spain, not having been a lace-making country of importance, I am disinclined to believe in the well-known record, that a native of Nuremberg, Barbara Uttmann, invented in 1561, pillow-lace making. Her tomb in the church-yard at Annaberg, is a construction apparently of the present century. The people who erected it have inscribed upon it, "Here lies Barbara Uttmann, died 14th January, 1575, whose invention of lace in the year 1561 made her the benefactress of the Hartz Mountains." The sort of work which she is said to have made and taught to

the people was a species of knitting. She was assisted in this by certain refugees from Flanders. It is quite possible that she may have made some sort of purling or even little borderings and insertions like the "merletti a piombini" of the Venetians. But since the Venetians directly influenced the Flemish, Barbara Uttmann's adoption of Flemish work can, I think, hardly be called an invention. I mention this point in connection with German laces, which by the way have not acquired any artistic reputation, since an idea seems to have got about that Barbara Uttmann was an original inventress. Early Flemish edgings are similar to the Venetian "merletti a piombini."

XXIV. We need perhaps trace the development of "brides" or tyes and other details in pillow-lace making. The history of them would be similar to that I gave in respect of needle-point work.

that I gave in respect of needle-point work.

XXV. As I have before remarked, design in pillow lace very much followed that in needle-point; and this we may see by comparing these two specimens (Fig. 11 and 12). In both speci-

Fig. 11.



Venetian needle-point lace.

mens we have the scrolls held together by tyes. The tyes are ornamented with little "picots," or loops, and fillings-in, or "modes," are noticeable in both. In the pillow lace (Fig. 12), however,

Fig. 12.



Pillow-made lace. 17th century.

there are no such raised masses as those of compact button-hole stitched work which we saw in the needle-point specimen. The general appearance of this specimen is quite according to a piece of Venetian seroll pattern, although it is flatly worked. Much of this scroll work, sometimes with tyes and sometimes with grounds of meshes, was done on the pillow, both in Italy and Flanders. The last specimen I showed you may, perhaps, be Italian. Here, however, is a specimen (Fig. 13) presumed to be Flemish. A great deal of this sort of lace

Fig. 13.



Pillow-made lace, "a brides." Flemish. 17th century. Sometimes called "Point d'Angleterre."

was imported into England in the middle of the 17th century, and went under the name of "Point

d'Angleterre."

XXVI. The real English lace of this time was commonly known as "bone lace," and was was commonly known as "bone lace," and was apparently so-called because it was made with bone bobbins. It was a lineal descendant of the "purling" of Chaucer's time, and the plaited and twisted thread trimming to Queen Elizabeth's ruff. We may see border lace, probably bone lace, sculptured on the tomb of Lady Doddridge, at Exeter, and upon other monuments of the 17th century elsewhere. Such lace was allied in style of make and design to the Venetian "merletti a piombini." Bone lace was the name by which most English pillow lace made during the 17th century was known. In Charles II.'s time its manufacture was of sufficient importance to demand Parliamentary attention. We had been influenced by Flemish pillow laces, and were, no doubt, doing our best to imitate them. But our English imitations were not fine and artistic enough to please noble and wealthy people, who accordingly, as in other countries, obtained their supplies of lace from abroad, and chiefly from Still it was thought wise to stimulate our bone-lace manufacture by stringently prohibiting importations of Flemish lace. To evade these stringent prohibitions, and to enable English lace dealers to supply the country with the esteemed Flemish laces, or as they had been called, "Points d'Angleterre," our manufactures obtained the services of Flemish lace-makers, and induced some to settle in England. This took place about 1662, a date which closely corresponds with the time when France, by the help of Venetian employés, was thinking of establishing her lace-making centres. France, however, more under paternal government than constitutional Parliamentary England, seems to have been the more successful of the two countries in obtaining celebrity for her newly adopted industry. "Points d'Alençon," I am

pillow lace. Bishop Berkeley in the early 18th century makes a remark upon the relative values set upon English, French, and Flemish laces. "How," he asks, "could France and Flanders have drawn so much money from other countries for figured silks, lace, and tapestry, if they had not had their Academies of Design." England has, however, now gone beyond France in the number of her Schools of Art, and through a solid progress of imperial and local co-operation she may soon be able to boast of a larger number of provincial museums, which in an important sense may become academies of design for the benefit of our manufactures.

XXVII. But we must return to our inquiries as to the development of pillow-lace making. We were particularly discussing pillow-made scroll designs held together by brides. Turning to pillow laces with grounds of small meshes, I have here a specimen of such work, and one in which a floral and more naturalistic treatment is noticeable (Fig. 14). Of about the same period—that is, I

Fig. 14.



Pillow-made lace, "à réseau." Flemish. 17th century.

think, near 1660—we have pillow laces in which other ornaments, such as heraldic devices and figures, were introduced. This (Fig. 15) is, perhaps, an Italian pillow lace of this period.

Fig. 15.

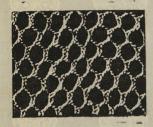


Pillow lace, with ground of meshes. Italian or Flemish. 17th century.

XXVIII. On the table are examples of Italian pillow lace, with a scroll pattern of conventional drawing, done with a ground of meshes. I am afraid that time will not allow me to trace the development of the various plaitings used at different lace-making centres for the meshed grounds or réseaux. Generally speaking, I do not think afraid, have always been more prized than Honiton that these réseaux came to be made before the

17th century. The Flemish makers appear to have excelled in producing them; and there are three important classes of them which I will now proceed to show you. We may take the Mechlin first. Mechlin, as a lace-making centre, dates from early in the 17th century, at least. Here are two specimens of characteristic Mechlin laces; the one with a close design, in which appear boys blowing horns, and carrying bows and arrows, is in the style of Louis Quatorze ornament, while the other, with a ground sprinkled with little roses, is some 70 or 80 years later. A feature in Mechlin lace is the thread or cordonnet which outlines the pattern; and another is the particular plaiting of the threads forming the meshes (see Fig. 16). When a

Fig. 16.



Enlargement of meshes in Mechlin lace grounds, showing the two plaited and four-twisted sides in each hexagonal mesh.

cordonnet and this sort of mesh appear in a pillow-made lace, it is safe to consider the lace to be of Mechlin manufacture.

XXIX. The second of the important pillow laces is the Valenciennes. I will show you the meshes first of all. You here observe that the threads composing the sides of the mesh are plaited (see Fig. 17). No sides, as in the Mechlin

Fig. 17.



Enlargement of meshes in Valenciennes laces, showing the plaiting for all sides of the mesh.

meshes, are merely of twisted threads. No outlining thread or cordonnet is used in Valenciennes lace. The pattern is flat, as you see it in this specimen of late 17th century. (Fig. 18.) This Fig. 19a is a specimen of later date, after the middle of the 18th century, when the patterns for lace consisted of flowers and buds sprinkled upon the ground, as we saw it, not only in the Mechlin lace, but also, during our last lecture, in designs for Point d'Alengon. The second specimen 19b might be

called a piece of "Fausse Valenciennes." The work is less regular, and the meshes are differently plaited. The third specimen, 19c, is a piece of present century Valenciennes lace, made probably at Ypres, and is a much more wiry and less soft-looking

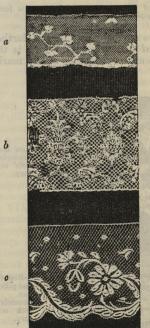
Fig. 18.



Valenciennes pillow lace,

lace than the old "Vraie Valenciennes" of the 18th century. An interesting example of a French lace, done in the style of Valenciennes, with ill-drawn

Fig. 19.



Pillow lace.
"Vrai Valenciennes."
Late 18th century.
French.

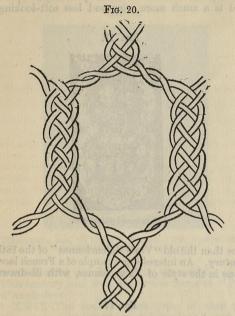
Pillow lace.
Valenciennes.
Early 18th century.
French.

Pillow lace.
Valenciennes.
Made at Ypres.
Flemish.

Scripture figures and legends, lies on the table. There are indications that the date of its production was about the first ten years of the 18th century.

the 18th century, when the patterns for lace consisted of flowers and buds sprinkled upon the ground, as we saw it, not only in the Mechlin lace, but also, during our last lecture, in designs for Point d'Alençon. The second specimen 19b might be

of either Mechlin or Valenciennes (see Fig. 20). The plaited side of a Brussels mesh is longer than that of a Mechlin mesh, otherwise these two latter



Enlargement of mesh of Brussels ground, showing the four-twisted and two-plaited sides in each mesh.

sorts of meshes are much alike. But a further distinctive mark of Brussels pillow lace is the raised plaited cordonnet or edging which marks

Fig. 21.

illow lace. Brussels. 18th century.

Needlepoint and pillow Brussels, 18th century.

the patterns. This you might notice in this specimen (Fig. 21a). This piece dates from about lace.

the commencement of the 18th century, and the pattern is remarkable as being a pillow-lace rendering of an Alençon design. The second specimen (Fig. 21b) is of the same period. It is a mixture of needle-point and pillow lace. The floral details are worked with a needle and the ground is pillow made. The two specimens shown in Fig. 22 are portions of lappets. Fig. 22a is again an example of an adaptation of a Point d'Alençon pattern rendered in pillow lace. The rough indications of the variety of devices introduced into this lappet do poor justice to the extremely elegant manner in which the threads themselves have been plaited to represent the forms of flowers, birds, variegated



Lappets of pillow-made lace. Brussels. 18th century.

"modes," &c., actually shown in the original lace. The second lappet (Fig. 22b) is of close floral design, and this close arrangement of flowers and leaves, broken by small interspersed mesh grounds, has been considered to be a mark of early Devonshire lace. But the workmanship is precisely like the Brussels lace, and I am inclined to assign to such piece a Brussels rather than a Devonshire origin.

XXXI. Of the various methods used by Brussels lace-workers in executing portions separately, of bringing them and fixing them together to form a whole piece, as well as of the many combinations of needle-point and pillow-lace making, I am sorry not to be able now to speak. Such details would, if justly treated, supply matter enough for a separate lecture. The specimens upon the table are a small index of the variety of patterns worked by the Mechlin, Valenciennes, and Brussels pillowlace makers, and some of them are, as you will see, of beautiful finish in workmanship, as well as of intricate design.

XXXII. My object this evening has been to place before you a summary of incidents respecting lace made on the pillow, and I hope I have to some extent shown you that it is a branch of the art of lace-making originating from a source different from that of needle-point lace-making, and yet, in the progress of its design and pattern growth, becoming much allied with that of needle-point

LECTURE IV.—Delivered Monday, May 9, 1881.

Résumé as to styles of design in hand-made lace. Traditional patterns. Modern hand-laces at Burano, Bruges, Honiton, &c. Sketch of the development of inventions for knitting and weaving threads to imitate lace. Differences between machine and hand-made laces.

I. This evening, in my concluding lecture, I propose to take a passing survey of a few of the principal topics in the history of the art of lace-making, to which I have called attention.

II. In tracing the history of the two great divisions of lace-making by hand, needle-point and pillow, I have sought to establish a gradual development of the art, rather than to insulate it by itself, and to regard it as some freak of handicraft of unac-

countable spontaneous birth.

III. Needle-point lace-making is distinctly a child of embroidery; pillow lace-making, a lineal descendant of plaited thread-work and fringes. Both chiefly owe such fame as they have acquired to the beauty and variety of form imported to their productions by the genius of designers of patterns. When artists considered free threads (looped, plaited and twisted) as a fitting vehicle for representation of patterns, a higher career for the employment of looping, plaiting, and twisting commenced. This career shows first signs of development in Venice early in the 16th century. From Venice, fancy, fashion, imitation, and other such ever lively influences, spread the newly-developed white thread-work to other countries. In each country where the art happened to become implanted, the special circumstances of the various people gave it some sort of character, either in a strong or a weak degree.

IV. Thus, the laces of Flanders, in their first stages of growth linking themselves to those of Italy and Venice, later on are entirely different in appearance from their ancestors. This is particularly so as regards the Valenciennes, Mechlin, and Brussels pillow lace. French needle-point laces, again, have, as we have seen in the Point d'Alençon, a specialty in appearance which, without the gradual steps by which we have traced them from the "Punt in aria," might be said to have no likeness to their antecedent Venetian parents. English laces, on the other hand, are not so markedly detached from the general family. On the whole, they closely resemble Brussels, Mechlin, and Valenciennes laces, though at the same time Honiton lace, with its prettinesses of floral devices, may claim to stand by itself. In respect of other countries, the methods of making lace are similar to those involved in one or other of the categories above specified. The designs of such laces are either direct imitations of older laces, or else are of so unmarked and general a character as to lose themselves in the primitiveness of design, which may be said to be the common property of all form-depicting countries.

V. I have prepared a diagram to show, in a general manner, the periods of different styles of patterns in lace-making (Fig. 1, p. 30). These extend from 1540 to the present time; and I have roughly divided them into seven epochs, some of them overlapping, preceding, and succeeding ones. Upon the diagram you will observe black bands of varying size. The first one is intended to indicate the growth and progress of needle-point lace-making; the second, that of pillow-lace making; and the third, that of

machine-made lace.

VI. In respect of hand-work, Ithinkneedle-point lace developed itself sooner than pillow-made lace. But the difference in date is possibly so slight as not to be worth close inquiry. Needle-point, at starting, took the stronger growth of the two perhaps. It seems to have reached a climax from between 1650 to 1720. Then it declined, and from 1790 to the present time it seems to have preserved an even life. It is now not of such strong life as that of either pillow-made or machine-made lace. As regards pillow lace, it appears to have expanded in vigour, as needle-point declined, so that its period of supremacy might be placed at from 1680 to 1780. From 1790 to about 1850 the annual quantity of pillow-made lace became smaller perhaps than formerly, but soon it revived, and now seems to be larger. As to machine lace, that may be said to have begun its life with the machine-making of nets about 1770, and in a hundred years to have become probably more than a hundred times as important in quantity as needle-point and pillow lace combined.

VII. We have discussed, principally in their respective classes, those laces which have celebrity for beauty of pattern, as well as for fineness of workmanship. And we have seen that these come from Venice, Alençon, Valenciennes, Mechlin, Brussels, and I think it would be unpatriotic if we did not add Honiton. But, now, we should give a share of attention to other less celebrated laces, and I will therefore show you a few specimens of them. Of German provincial laces—evolutions, as we may take them to be of Barbara Uttmann's 16th century work—there are two pieces, both from the district of the Erzegebirge (Fig. 2, p. 31). Although made recently, the patterns displayed in these laces might almost be of any date. They are, evidently, traditional patterns, handed down through generations of lacemakers, without much modification since the time when they were first made, which was, probably, in the 17th century. The upper specimen, with its large circular device and quaint plant form, is similar to some lace made in

Holland. The lower is what would be called a sort | lace, only in coarser thread than that used by the of "torchon" lace. The principles of design in this are simple, the pattern consisting of various lozenge shapes. It is not unlike that used by the peasants of Dalecarlia, in Sweden, who, for some hundred and fifty years, have made this sort of

Germans.

VIII. Patterns, somewhat similar, have been used by the inhabitants of the Island of Crete. There is a large collection of Cretan laces at the South Kensington Museum. Little, if anything, is known

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Harrion	1540 TO 1590.	Ge om etrica Introduction forms as worked floral and hu in Redicella and forms, and s Punt in aria. No "bride" or to gether meshed ground "brides" or tugether used.;		ly ol con lines, ale nes, the in the white,	ter on me on. er andertore da the Valender v lace. Freed os ve lace seen if in apparence
ove him to him t	DATE .	SPILE OF PATTERN {	NEEDLE-POINT LACE	PILLOW-MADE LAGE	Machine-made Lace

of the origin of lace-making there. It has a likeness in many respects to the quaint pillow laces of South Italy. Crete has been intimately connected with Venice, and very probably Cretans learnt the art of lace-making from Venetians and other the majority of the samples at the South Kensing-Tables of the samples of the

Italians. The workmanship displayed in these ton Museum are outlined with one, two, or three

bright coloured silken threads, which form the in which we have a line of stately figures, holding cordonnet of the lace. As a rule, the motives of the Cretan lace patterns are traceable to orderly arrangement and balance of simple symmetrical

Fig. 2.



German pillow-made laces. 18th century.

and geometrical details, such as diamonds, triangles, and odd polygonal figures. Sometimes the patterns owe their origin to untutored imitation of a blossom or leaf. Here are two specimens of the Cretan lace (Fig 3, a b). I have specially selected one of the more ambitious of the Cretan design, that

Fig. 3.



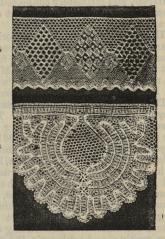
Pillow-made laces from South Italy (18th century), and from Crete. Early 18th century.

hands, strongly suggestive of those delightful persons which are cut out of paper for infantile delectation. The specimen beneath is of silk. Lace, I believe, is no longer made in Crete. The specimen in which two birds appear, together with forms, the meaning of which I cannot elucidate, is of South

Italian lace (Fig 3 c).

IX. From Italy we may cross Bohemia, and place ourselves in Central Russia. Pillow lace has been made there for over a hundred years, by peasants of different districts. Following in the wake of fashion of Western Europe, Russia, under Peter the Great, towards the end of the 17th century, took up with lace-making. A silk lace factory was then established, but no cultivated artistic spirit ever raised the productions of this factory to special distinction. The patterns now used by Russian lace-makers bear all the stamp of traditional provincial patterns used by different European peasantries. Lace is made in Russia in the districts of Belev. Vologda, Riazan, and Mzensk. This scalloped border (Fig 4 a) is made in the Belev district. Its

Fig. 4.



Russian pillow laces. 19th century.

big meshed ground is plaited similarly to Italian and Valenciennes grounds. The border (Fig 4 b) with small vandyked edge reminds us of the style of German and Swedish "torchon" lace. It is also suggestive of a lace made a few years ago at Ripon, in Yorkshire.

X. Thus, over a great area in Europe, we may judge how lace-making of nearly uniform style of design has spread itself. It is a humble and rather precarious means of support for peasants, and in this condition it cannot be expected to rise to any status of artistic importance. Sometimes a little stimulus is given to the efforts of one set of peasants, sometimes to another, as for instance, at the present time, when fanciers of hand-made lace purchase in fairly considerable quantities trimmings and borders of Russian lace.

XI. From specimens, the origin of which is identified with various countries, we may pass to lace-makers themselves, their training to the practice of the art, and a few of the circumstances by Bishop Berkeley in the 18th century.

of their practice.

XII. The name manufacture seems at once to call into view smoky towns with lofty many-storeyed buildings, high chimneys, roaring furnaces, belching steam-engines, and crowds of busy workmen. such places we may, in a single great house, pass from masses of raw material, and, traversing a series of rooms, note in each, perhaps, some phase in the metamorphosis of, say, clods of damp clay into stores of hard clear-glazed vases, cups, saucers, and such like, or of pigs of iron into workmen's utensils and complicated machinery.

XIII. Now, as regards lace made by machinery, the process of converting the raw material into a length of lace is not so complete as either of the two instances above referred to. Threads used for lace are made in a manufactory distinct from the lace manufactory. A like arrangement exists in respect of hand-made laces, that is to say, that the lace-worker is not also her own spinner of thread, though three hundred years ago, the spinner of threads, with her distaff and wheel, would sit in the same room with the needle worker; but this association of two separate employments in time was broken up, and division of labour, a subject full of interest, and intimately connected with the development of organisation in respect of manu-

XIV. The present position of lace-workers does not appear to differ very materially from what it always has been, and some interesting facts concerning it have been kindly supplied by Mrs. Percy Smith, in regard to Belgian pillow-lace workers at Bruges. Lace there is made by children and by adults. The children begin work in convent schools, when they are as young as five or six. They first make a small "torchon" lace, smaller and less elaborate than specimen in Fig. 4b (p. 801), but of that character of work, in which you will not observe any subtleties of "modes" or fillings-in, like those we saw in the fine specimens of Brussels lace exhibited last Monday. Many of the Belgian generation of artisan children are thus, early in life, grounded in the art of lace-making. This grounding takes up a principal part of their school-time, for whilst two hours a day are given to reading, writing, and arithmetic, the remainder of the day is devoted to lace-making. In a few perish schools, which are distinct from convent schools, lace-making is taught, but in a lesser degree than in the convent schools.

XV. As regards the class of lace-making women, the work by them is done in their cottages in the town. In summer you may look down long and wide back streets of the town, and see hundreds of women in groups of three, four, and five outside their cottages plying their bobbins most industriously. In winter if you walked down such streets you would find the women at work, sitting by the windows indoors. It is estimated that there are over 4,000 lace-makers at Bruges, and of these many, doubtless, help to sustain Bruges in her mediæval reputation for pretty faces. Lace-makers have to be careful of their hands, as roughness in the skin is liable to make the lace yellow-looking and dirty, a factor which considerably depreciates its value, hence lace-makers should not also follow agricultural pursuits. The picture of these lace workers at Bruges very much resembles that given

speaks of English labourers in the South, he says, "on a summer's evening, they sit along the streets of the town or village, each at his own door, with a cushion before him, making bone lace, and earning more in an evening's pastime than an Irish family would in a whole day."

XVI. To return, however, to Belgians of the present day, the laces made are collected for the merchants, whose agents, on market day, sit in little boxes, like ticket offices, in the market place. To these the makers bring their laces, which are received and paid for by the agent. At the same time, the agent gives to the worker fresh orders, and serves out the pattern to be done. Every pattern, after it has been worked, has to be brought back to the agent, under penalty of a heavy Government fine, which thus is a protection of designs.

XVII. Now, as regards the design, you may remember how much a good rendering of pattern depends upon the skill of the pricker, who determines where the pins are to be placed as the twisting and plaiting proceed. In convents, the instructors usually undertake to prick the patterns; but for the other body of lace-makers, the pricking is done (at least, in Bruges) almost entirely by one woman, whose renown as a pattern pricker is such, that, at the present time, she has commissions which will take her eighteen months to execute.

XVIII. Coming now to thread used by the workers, it is a curious fact that, although the flax is grown in Belgium, the twisting it by machinery into fine threads is done in England. The thread, when made, however, is not found to be a pure flax thread, for there is a slight admixture of cotton with it; and this imparts a measure of hardness to the lace, a detrimental quality which earlier laces, made with handspun thread, do not, fortunately, possess. lace-makers have to use hand-spun thread, they obtain it from the town of Alost, where Belgian spinners make the thread. This purer and softer thread is used for the better qualities of Belgian needle-point lace, specimens of which lie on the Work of such sort is done to special order; and its price, £12 to £15 per yard for widths of four or five inches, renders it scarce.

XIX. I now wish to offer you a few remarks upon styles of patterns used in the United Kingdom. laces of Buckinghamshire and Devonshire standfirst perhaps amongst English laces. Here is a figure (5, p. 33), showing three sorts of Buckinghamshire lace. In the first one (a) we may notice a variety of fillings in. This variety gives the name of Trolly lace to such specimens. It is of 19th century work, but an adaptation of Mechlin "Trolle Kant," or sampler lace, sent round to dealers and purchasers to show the variety of patterns which the lace-makers happened to be engaged upon. The other two specimens (b, c) are also of Buckinghamshire workmanship, and like the first, are clearly indebted for patterns and general style to

Flanders.

XX. Lacemadein Devonshire, at Exeter, Honiton, and elsewhere, is very much in the style of Brussels laces. The little separate sprays of flowers worked on the pillow, and then used in application to net, &c., have to some extent become celebrated. A naturalistic treatment in the drawing of the flowers, and leaves, and insects, which appear in so-called Honiton guipure, or pillow lace with ties, is a distinguishing characteristic of this class of English lace. Sometimes a costly specimen of Honiton lace is made for a special purpose, and

Fig. 5.



English pillowlaces. 18th century.

then, according to the requirements of the person who may have ordered the work, the lace is made with better care than usual. Of such works we have two important specimens, lent by Messrs. Hayward and by Messrs. Howell and James.

XXI. Although private enterprise and courtly patronage have essayed, and to an extent succeeded, to implant the art of lace-making in the United Kingdom, and although from time to time direct foreign influences have been infused into it, as by refugee Flemings in the 17th century, a practice of the higher ornamental phases of the art has never fairly and successfully rooted itself here. Before artistic lace-making had fairly developed in the later years of the 16th century, England had been gradually slipping away from Papal supremacy. Convents and monasteries, in which branches of fine art have ever been fostered, almost disappeared from England, and no in-stitutions so strict for artistic and disciplinarian purposes succeeded to them. To a cause like this we might assign the failure of England to become a leading producer of lace. A Frenchman, who wrote in 1852 upon lace-making, gives, however, a different cause, which is amusing. Granting that if the product of all products, requiring grace in its development, be lace, how, he asks, is Italian 17th century raised scroll point, you will it possible to find grace in England? Do you see here an astounding combination of almost

then, at an Englishman walking; look at him when he makes a bow; look at him as he takes a seat, as he enters a room, as he hands a cup to anyone, and so forth. The conclusion clearly is that the Frenchman was right—we were awkward, we had no grace, and so were incapable of making good lace. But now, remembering that such observations were made thirty years ago, when England, "perfidious Albion," was in her final stage of perfidy towards France, it will not surprise us much to find a vast and admitted improvement in regard to much of our lace-work. In the matter of machine lace, a subject we shall shortly touch upon, we may boast of as good quality of design and workmanship as exists anywhere; while for our hand-made laces, the specimens of Honiton pillow lace and Irish needle-point lace are surely re-assuring to anyone who is doubtful of British powers in this art. At the same time, in speaking of this Irish needle-point lace, called "lacet," I must tell you that the greater part, if not the whole of it, is produced in Irish convents. Of other Irish laces I may say that there are about eight so-called different sorts. But Limerick lace is a tambour embroidery, I think; Carrickmacross lace is a sort of cut muslin work; pearl tatting, or "Frivolite," is clearly neither genuine pillow nor needle-point lace, and the varieties of crotchet imitations do not of course belong to either of the two important branches of

XXII. Some thirty odd years ago, Parliament voted money for the encouragement of normal schools for lace-making in Ireland. From causes which do not require discussion, the Governmental encouragement was withdrawn, after having existed for some ten years, and the schools are now closed.

XXIII. Lace is made by Irish peasants in their cottages and cabins. They work chiefly from traditional patterns. No inspection for instructive purposes, or for suggestion of new patterns is provided, save such as may be derived from the relations between lace-dealer and lace-maker. peasants are left somewhat to their own devices, and so one does not look for much artistic work from them. The better Irish lace—lace which may rank with lace of the finer classes altogethercomes from the convents, where fine old patterns and well selected new designs can be re-produced.

XXIV. Returning once more to the Continent,

we shall find, in France, Austria, and Italy, a considerable life in the making of lace by hand. It is a popular fancy to suppose that the art is dead. The patronage which the wealthy can and do accord to the art, stimulates the production of new works, and while such patronage is intelligently and discriminately extended, the art lives.

XXV. From Vienna come occasional specimens of needle-point lace-work. The extraordinarily fine collar of needle-point lace, a modern version of raised Venetian Point of the 17th century, lent by Mrs. Alfred Morrison, was, I believe, made under the direction of a Viennese lace merchant, who employs Bohemian lace-makers. Putting aside the question of design, which in this over-elaborated collar has not the dignity of an want proof of this, writes this Frenchman? Look, incredible minutiæ, executed with a perfection of

finish which rivals that displayed in earlier work. Needle-point lace is also made in France, exceptionally, perhaps, but still sufficiently to show that what has been done can be done again.

XXVI. In Italy a new departure has been taken in the making of hand-made laces, at the Island of Burano, near Venice. "This island, in the 16th and 17th centuries, was one of the principal seats of the celebrated lace manufacture of the Venetian provinces. The formation of the school recently established there, and the revival of the art of lace-making in Burano, arose out of the great distress which, in 1872, overtook its inhabitants. The extraordinary severity of the winter of that year rendered it impossible for the poor fishermen, who form the population of the island, to follow their calling. So great was the distress at that time, that the fishermen and their families were reduced to a state bordering on starvation, and for their relief contributions were made by all classes in Italy, including the Pope and the King. This charitable movement resulted in the collection of a fund of money, which sufficed to relieve the immediate distress and leave a surplus applicable to the establishment of a local industry, which seems to be not unlikely to permanently increase the resources of the Burano population.

"Unfortunately, the industry at first fixed upon, namely, that of the making of fishermen's nets, gave no practical result, the fishermen being too poor to purchase the nets. It was then that a suggestion was made by Signor Fambris that an effort should be made to revive the ancient industry of lace-making. Princess Chigi-Giovanelli and Countess Andriana Marcello were asked to interest themselves in and to patronise a school for this purpose. To this application those ladies yielded a ready assent, and at a later period Queen Marguerite graciously consented to become (as her Majesty still is), the president of the insti-

tution.

"When Countess Marcello (who from that time has been the life and soul of the undertaking) began to occupy herself with the foundation of the school, she found an old woman in Burano, Cencia Scarpanile, who preserved the traditions of the art of lace-making, and continued, despite her seventy years and upwards, to make "Burano Point." As she, however, did not understand the method of teaching, the assistance was secured of Madame Anne Bellorio d'Este, a very skilful and intelligent woman, for some time mistress of the girls' school at Burano, who in her leisure hours took lessons in lace-making of Cencia Scarpanile, and imparted her knowledge to eight pupils, who, in consideration of a small payment, were induced to learn to make lace.

"As the number of scholars increased, Madame Bellorio occupied herself exclusively in teaching lace-making, which she has continued to do with surprising results. Under Madame Bellorio's tuition, the school, which in 1872 consisted of the eight pupils (who received a daily payment to induce them to attend), now numbers 320 workers, paid, not by the day, but according to the work each performs. In this way they are equitably dealt with, their gains depending on their indi-

vidual skill and industry.

"In Burano everything is extremely cheap, and a humble abode capable of accommodating a small

family may be had for from 600 to 1,000 Italian lire. It is not a rare occurrence to find a young girl saving her earnings in the lace school, in order to purchase her little dwelling, that she may take it as a dower to her husband. Nearly all the young men of Burano seek their wives from among the lacewomen, and the parish priest reported last year facts which showed conclusively that the moral condition of the island, consequent on the establishment of the lace school, has improved in a very striking degree.

"The lace made in this school is no longer ex-

"The lace made in this school is no longer exclusively confined, as in the origin it was, to Burano Point, but laces of almost any design or model are

now undertaken.

"In order the better to carry out the character of the different laces, the more apt and intelligent of those pupils whose task it is to trace out in thread the design to be worked, have the advantage of being educated by means of drawing lessons from

professional artists.

"The 320 workwomen now employed are divided into seven sections, in order that each may continue in the same sort of work, and as far as possible, in the same class of lace. By this method each one becomes thoroughly proficient in her own special department, executes it with greater facility, earns consequently more, and the school on its part gets the work done better and cheaper (although of course cheapness must always be very relative)."

XXVII. Besides specimens of lace now made at Burano, on the table before us, I can show you two slides of the lace. The first (Fig. 6) is a needle-

Fig. 6.



Needle-point lace. Burano. 19th century (1879).

point lace, "à brides," with a marked cordonnet. It is rather in the style of so-called Argentan designs. The second (Fig. 7) is more in the style

Fig. 7.



Needle-point lace. Burano. 19th century (1879).

of 17th century Venetian needle-point lace, with a ground of hexagonal "brides" with "picots."

We have now to consider machine-made lace. And in approaching this section of my lecture, I must tell you beforehand that it is difficult to attempt to give a short description of the process. Of course, if we had had to discuss the mechanism of man, why and how his mechanism permits the manufacture of lace, in the same way that we may discuss the lace-making machine, the human machine would be the more wonderful of the two. Still, whereas I have devoted two lectures to processes of making lace by hand, and now propose merely to give a portion of a lecture to lacemaking by machinery, you will not suppose that this determines the relative importance between the two branches of lace-making by hand and by machinery.

Mr. William Felkin has written a considerable work upon the lace machine. He shows that it is very much from the art of knitting that we trace the origin of the machine for making lace. Knitted caps and hose date in England from the end of the 15th century at least; as various Acts of Parliament testify. Knitted stockings, however, possibly from the difficulty of forming the heels and feet, seem to have been later, for Henry VIII. is said to have had, for ordinary wear, cloth stockings, "except there came from Spain by chance a pair of silk stockings." Even as late as 1610, "so unfashionable were young gentlemen commoners," that George Radeliffe, writing from University College, Oxford, to his mother, asks for a green baize table-cloth, "of which, if too little for my table, I will make a pair of warm stockings." But some 27 years previously to this, the town of Sheffield can claim the credit of having given from its trust funds 13s. 3d. to "William Lee, a poore scholler of Sheffield, towards the settynge him to the University of Chambridge and buyinge him bookes and furniture." This William Lee, who became a elergyman, was for some reasons expelled from his college (St. John's), where he held a fellowship. He appears to have married an innkeeper's daughter, and after the loss of his fellowship soon fell into extreme poverty. In his distress to find a source of income, his inventive faculties were called into play. The only support for his wife and child appears to have been derived from the sale of hand-knitted stockings. Sitting constantly with his wife, the scholar often fixed his attention on her dexterous management of the needles. In course of time he invented a me-chanical contrivance, by which stockings might be more quickly knitted than by the hands. This is generally accepted as the first stocking-loom. The news of this invention, which was at once recognised as a formidable rival to hand-work, soon spread, but the antipathy to it prevented its becoming successful in England. Queen Elizabeth regarded with contempt a man's invention of a mechanical weaver of stockings, and the Rev. William Lee's petition to her Majesty for Royal patronage passed unnoticed. From James I., Lee gained as little encouragement. He accordingly went to France. Henry IV. and his minister Sully warmly espoused his cause, and matters went prosperously with Lee until his death. It might from this be supposed that France remained in

solitary possession of this valuable invention, but Mr. Felkin tells us that Mr. James Lee, son of Rev. William Lee, soon after his father's death, determined to transplant the manufacture of knitted stockings by machines to England. He accordingly brought frames and experienced workmen to London, and started operations in Old-street-square. Upon this becoming known, a spirit of imitation seized different people. Stockingknitting frames were set up in Nottingham. Venice, the old home of artistic lace-making, was almost foremost in striving to establish stockingknitting factories, but her attempts in this direction, through lack of skilled workmen, who should replace plant as it was worn out, soon collapsed. England, however, rapidly developed the number of her stocking looms, and between 1670 and 1695, upwards of 400 such machines were exported to France, Flanders, Spain, Italy, and Sicily. The English Legislature about this time placed its veto upon such exportation. The manufacture in this country continued in great force. Charters were granted incorporating companies for the working of stocking machines, and Parliament was called upon to consider petitions on the matter from the various manufacturing centres. In 1758, Mr. Jedediah Strutt introduced a method of ribbing stockings as they were made, and the machine for so doing was called the Derby rib machine. Other modifications of the stocking machine followed. It was about this time that taste for lace ruled that meshed grounds lightly sprinkled with small ornaments should be the most fashionable laces. Hence fine meshed fabrics like net and tulle seem to have arisen. Manufacturers in London and Nottingham applied themselves to make lace net upon stocking frames, about 1770, and so far as plain nets were concerned, they were successful in producing looped net fabrics of perfect regularity. Early in the present century, Mr. Heathcoat, of Nottingham, invented a machine for making bobbin net. After him came Mr. John Leaver, whose lace-making machines and modifica-tions and improvements of them, to which have been applied the apparatus of the celebrated Jacquard loom, are in use at the present

XXX. Broadly speaking, lace-making by machinery is more nearly like the pillow-lace making process than that of needle-point. The machine contrives to twist any desired threads around one another. In pillow-lace making, besides twisting, we have plaiting. This plaiting has not been reproduced by the majority of lace machines. Quite recently, however, a French machine, called the "Dentellière" has been invented to do plaiting. Time will not allow me to refer in detail to the "Dentellière," of which a description has been published in a journal, entitled La Nature, dated 3rd March, 1881. Whilst, as we shall see, the ordinary lace-making machine belongs to the family of weaving machines, the "Dentellière" more nearly resembles the pillow of a lace worker, with the threads arranged over the pillow. In general appearance it looks something like a large semi-circular framework of iron, with thousands of threads from the outer semi-circle converging to the centre, representing the table or pillow. Over this central table is the apparatus which holds the end threads

side by side, and which regulates the plaiting of them. The cost of producing lace in this manner is said to be greater at present than by hand, and

the mechanism is under revision.

XXXI. In respect now of the lace machine which is in common use, I would ask you to reflect, that the mechanism to obtain and regulate the motions of each thread is intricate, and represents the sum total of much scientific thought, and its application to guide practice over a long course of years. Of the number of threads worked by a Leaver's machine, like that described in the Journal of the Society of Arts (18th and 25th Sept., 1874), it may be sufficient to say that there may be some 8,880. Of course the pattern to be worked into lace governs the number of threads. To produce the pattern shown in the Journal above-mentioned, 48 bobbin or shuttle threads, and 100 beam or warp threads were employed for each piece of lace. Sixty pieces of lace were simultaneously wrought, and thus sixty times 148 threads were brought into operation. This gives a total of 8,880 threads. Now, each of these 8,880 threads had its own particular duty to perform, and I hope to be able to convey to you some slight notion of these duties.

XXXII. The threads in a Leaver's lace machine then, may be divided, as they are in the loom, into two sets, the one which we may call the warp or beam

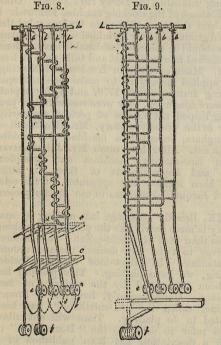


Diagram showing action of a slack weft thread in connection with taut warp threads.

Diagram showing action of taut weft thread in connection with slack warp threads.

threads, and the other the weft or shuttle threads. The ends of both sets of threads are fixed on a cylinder or lace beam, which corresponds in its use with the first row of pins on the pillow, in pillow-lace making. The supply of the threads, warp and weft, is held by reels or bobbins. The reels of the warp threads are different from those

of the weft threads. The warp thread reels are arranged in trays or frames beneath the stage, above which, and between it and the cylinder, the twisting of the weft with the warp threads takes place. The supplies of the weft threads are contained in flattened reels or bobbins, which are of a shape as to be conveniently passed between the stretched warp threads. Each bobbin for the weft thread can contain about 120 yards of thread. By most ingenious mechanism, varying degrees of tension can be imparted to the warp or weft threads. The bobbins of the weft threads, as they

Fig. 10.

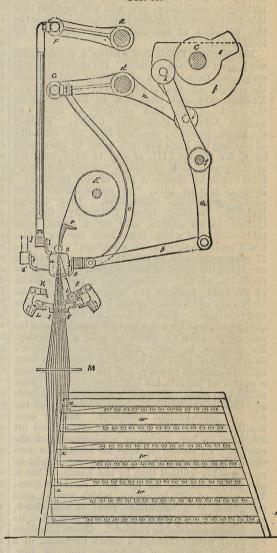


Diagram of principal details in a lace-making machine.

pass like pendulums between the warp threads, are made to oscillate, and through this oscillation the threads twist themselves, or become twisted with the warp threads. As the twistings take place, combs passing through both warp and weft threads

compress the twistings. Thus the ordinary machine-made lace may generally be detected by its compressed twisted threads. In it will not be seen any plaiting, such as we find in pillow-lace, or lace made by the "Dentellière" machine. We cannot, moreover, trace in machine lace any simulacrum of button-hole-stitch work, as we have it in needle-point work.

Fra. 11.



Pillow-made lace. Mechlin. Early 18th century.

XXXIII. The diagrams (Figs. 8, 9, p. 806) are intended to show the effects obtained by varying the tensions of weft and warp threads. For instance, if the weft threads, $(b\ b\ b\ b)$ in Fig. 8, be taut, and the warp thread (a) be slack, the warp thread will be twisted on to the weft threads. But if the warp thread (a) be taut, and the weft threads $(b\ b\ b\ b)$ in Fig. 9) slack, then the weft threads will be twisted on to the warp

Fig. 12.

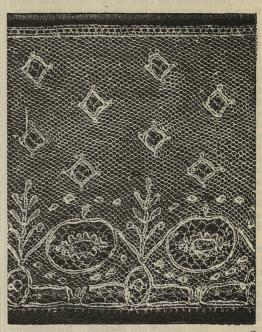


Machine-made imitation of Mechlin pillow lace.

thread. At the same time we should remember that the twisting in both these cases arises from a conjunction of the movements of the two sets of threads in this matter, namely, the movement from side to side of the beam or warp threads,

and the swinging or pendulum-like oscillations of the bobbin or weft threads between the warp threads.

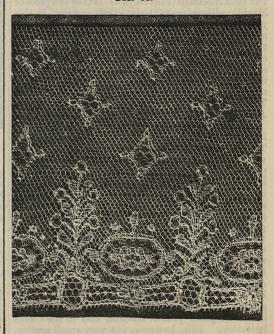
Fig. 13.



Pillow-made lace, Mechlin, 18th century.

XXXIV. The diagram (Fig. 10, p. 806) represents a section of part of a lace machine, showing E, the

Fig. 14.



Machine-made imitation of Mechlin pillow lace.

cylinder or lace beam, upon which the ends of both warpand weft threads are fixed at starting. Beneath is w w w, a series of trays or beams, one above the other, containing the reels of the supplies of warp threads; cc represents the slide bars, for the passage of the bobbin b, with its thread, from K to K, the landing bars one on each side of the rank of warp threads, st, are the combs which take it in turns to press together the twistings as they are made. The combs are so regulated that they come away clear from the threads as soon as they have pressed them together, and fall into positions ready to perform their pressing operations again. This by no means exhausts the story of all that the lace machine does. The contrivances for giving each thread a particular tension and movement, at a certain time, are most subtle. They are closely related to the Jacquard system of pierced cards. The machine lace pattern-drafter has to know more of this mathematical calculation than of drawing lines and curves. His work consists, principally, of calculating how many holes shall be punched in a card, and of settling where each hole is to be punched. Each hole regulates the movement of a thread

XXXV. We may now look at a series of specimens of machine-made laces. The first specimen (Fig. 11) is that of a Flemish pillow-lace design of the early 18th century. In it you will notice the variegated appearance of the meshes of the ground. A thread, you see, outlines the pattern, which has a fine linen appearance. Now the manufacturer (see Fig. 12) has merely attempted to reproduce the His meshes are regular. No outlining thread marks the pattern, which, instead of being filmy, like linen or cambric, is ribbed. This specimen, recently made at Calais with a Leaver machine, which is worked upon the principles I have above mentioned. The cost of this machine lace is 1s. 2d. a yard, and the value of the original is £1 5s. per yard. The next specimen (Fig. 13, p. 37) is that of a piece of Mechlin pillow lace of the late 18th century. In this you will again observe the comparatively slack manner in which the threads in the ornament are twisted and intercrossed. Here is the mechanical counterfeit of this piece (Fig. 14). The ground is similar to wire netting, while the threads to imitate those slack twistings of the original are rigid and much more regular. This, too, was made at Calais. The value per yard of the hand-made lace is £1 10s., whilst that of the machine is 2s. 9d.

XXXVI. I have now a better example of machine imitation of Mechlin lace. Here is the original lace. The appearance of the thread, forming blossoms, which seem to be a kind of sunflower, a series of petals around a dark central disc, is similar in their looseness to those in the preceding specimen. Now, in the imitation produced by the machine, we have an ingenious twisting given to the threads of the ground, whereby, in lieu of the simple twisted ground-net of the previous example of machine, we have two sides of each mesh thickened to represent the two plaited sides of a hand-made Mechlin mesh. In obtaining this effect, however, the machine has to forego a looseness in twisting the other four sides of each mesh, which, consequently, have a tighter and harder appearance than that given to the corresponding sides of meshes, shown in the original pillow Mechlin and in the Calais imitation. This, however, is a very small matter, compared with the fidelity in general appearance,

which the Nottingham imitation before us possesses. This invention is considered to be the best of its kind. The cost of the hand-made lace, of which this is an imitation, is £1 10s. a yard. It was made last year at Louvain, and is a copy of a pattern introduced towards the end of the 18th century. The machine imitation wrought this year at Nottingham by a Leaver's machine costs 1s. 3d. a yard. The whole of the work is done by the machine, including, of course, the outlining thread. Machine lace, made with such outlining threads, has to be trimmed, so that these outlining threads which run from pattern to pattern, may be disunited, and left only around the required portion of the pattern.

XXVII. Here, however, we have an imitation lace, the cordonnets in which is worked in by hand. This specimen was made this year at Lyons. Hitherto we have seen machine-made imitations of the Mechlin class of pillow lace, i.e., laces with a thread outline to the pattern. Now, however, we will look at imitations of Valenciennes lace. First of all, we may remind ourselves of the appearance of handmade Valenciennes.

XXXVIII. Here, now, in Fig. 15, is a good

Fig. 15.



Machine-made imitation of Valenciennes pillow lace.

quality of machine-made Valenciennes. It is made at Calais, by machines similar to those used at Nottingham. Another specimen is more elaborate in design, and woven with finer thread. It is considered to be as good as the machine can make.

XXXIX. The last illustration I have to show is a copy made at Nottingham last year of a specimen of that fine filmy needle-point lace made in the 17th century at Venice, and still made with great skill at Burano. This (Fig. 16, p. 39) is a specimen of the original lace, valued at about £5 5s. a yard. You will observe the flat and even appearance in the close portions of the pattern, the slight outline of thread, as well as the delicate tracery work, reminding one almost of a distant view of some fine Gothic rose window.

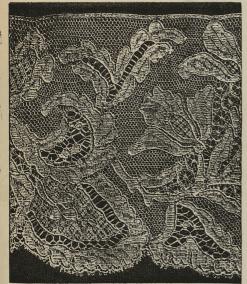
Fig. 16.



Venetian needle-point lace, "à réseau." 17th century.

XL. Herewehavethemachineimitation (Fig. 17). In spite of the ribbed appearance of the close portions, the sharp, clear, outlining thread, and the comparative wiry tautness of the ground, and of the little traceries, it is a wonderful piece of imitation.

Fig. 17.



Machine-made imitation of Venetian needle-point lace, "à réseau."

XLI. How much further man's ingenuity may compel mechanism to produce works, delusive counterfeits of handicraft, is a question not to be Messrs. Howell and James.

easily answered, if answered at all. For anyone desiring to follow the history of the art of lacemaking in its literary aspect, there is plenty of ground to be travelled over. But as I said in an earlier lecture, I do not think that this way of proceeding is as instructive as it is entertaining; and I doubt very much if any one adopting it would come even

To know the age and pedigrees, Of points of Flanders and Venise.

XLII. In the times of the Provence romance writers, French ladies as they worked sang "Chansons à toile." Italian poets have sung the praises of the needle, just as Taylor, our Elizabethan water poet, has lauded the "Needle's excellency." Some verses composed by Jacob van Eyck, in the 17th century, upon the art of lace-making, and a French epic, entitled, the "Revolte des Passements," appeared about the same time. Pope, Evelyn, Swift, Congreve, and many other writers of the 18th century comment on passing fashions, and refer to laces then in

XLIII. One of the latest of English poets, who seems to have perceived that patience, perseverance, gentleness, should predominate in the character of a lacemaker, is Mr. Lewis Carroll, who has immortally associated a beaver with the art. A "beaver that paced on the deck, or would set making lace in the bow," was a member of that notable band of personages who went out hunting a snark. But

when, as the poet relates,

The Boots and the Broker were sharpening a spade, Each working the grindstone in turn; The Beaver went on making lace and displayed No interest in the concern.

XLIV. The Barrister, another of the hunting party,

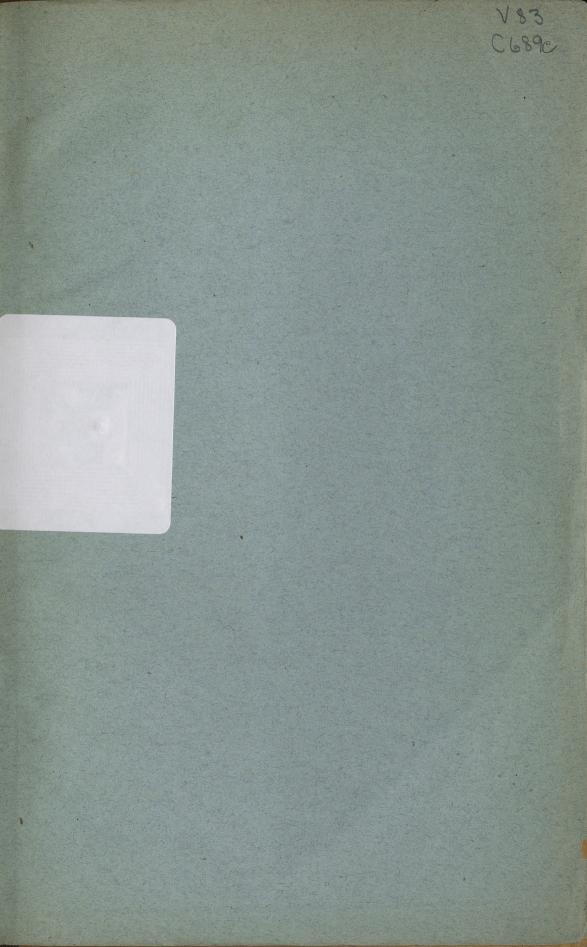
Tried to appeal to its pride,
And vainly proceeded to cite—
A number of cases, in which making laces,
Had been proved an infringement of right;
But the Barrister, wearied of proving in vain
That the Beaver's lace-making was wrong—

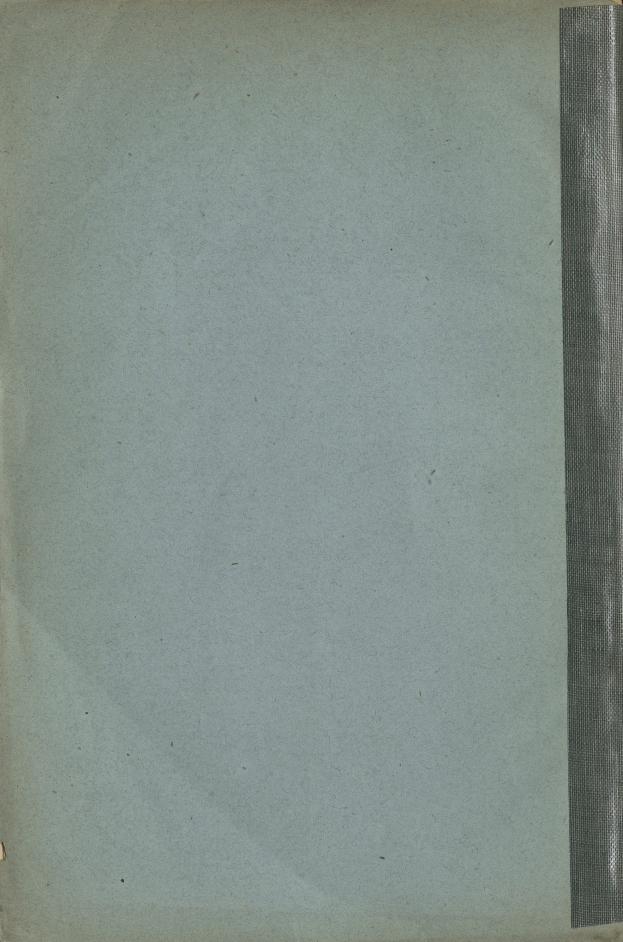
soon fell asleep, and leaving him in that condition, I will conclude without making further quotations from this strange poem, which may not enlighten us much upon the art of lace-making. As it mellows with time, perhaps it may fall into its place as a stepping-stone in the literary history of lace-

making.

XLV. It has been a privilege and pleasure to me to have been permitted to deliver this course of lectures upon the art of lace-making. In offering you my thanks for your forbearance with my shortcomings, as well as for the kind and appreciative attention you have evinced, I can but say that any dreariness which has attended my own personal efforts has, I hope, been relieved to some extent by the excellent illustrations furnished for our instruction and diversion by the authorities of the South Kensington Museum, Captain Abney, F.R.S., Sir William Drake, Mrs. Robert Goff, Mrs. Alfred Morrison, Mrs. Enthoven, Messrs. Hayward, and

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